

Where They Fit: The Under-Representation of Minoritized Students in Advanced High
School Coursework in Communities of New Diversity

A THESIS
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Joel Paul Leer

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Peter Demerath, Advisor

May 2021

Acknowledgements

From the time I completed my M.A. at Northern Illinois University in DeKalb in 1998, I started looking for the “right time” to pursue my doctorate. There were times it started to seem like the right time, but invariably, an obstacle would rear to put an end to the pursuit. And there were times when it seemed like it simply was not meant to be. I do not actually think that even the program I ultimately completed with this dissertation occurred at the “right” time. It may have just been the right *encouragement* that forced my hand. For that, I’m indebted to Dr. Chris Richardson, Dr. Gary Prest, and Dr. Matt Hillmann, who were simply unrelenting in their belief that I needed to do this, for myself, and for the school community in which I worked.

This dissertation exists because of the support, guidance, patience, and friendship I received throughout the process from my advisor, Dr. Peter Demerath. Very few people in my life can get away with advice like, “This sounds really good; now rearrange it entirely,” but Peter time and again mixed encouragement, honest criticism, and really good coffee in ways that kept me going through those numerous times I was convinced that finishing was not feasible.

I owe gratitude to the other members of my committee as well, Dr. Vichet Chhuon, Dr. Katie Pikel, and Dr. Gary Prest, whose encouragement, feedback, and steadiness gave me reason to believe this was all doable and all worthwhile.

This dissertation is a big unwieldy thing, and I am grateful to my friends and colleagues Lori Christophersen, who transcribed numerous interviews into text that I could more easily code, and Katie Casson, who not only read chunks of my study, but also spent hours listening to my ideas, thoughts, and questions about my study, and was

willing to be honest with me about much revision my thoughts and writing needed at times.

It is hard to quantify or find words for the amount of love, energy, confidence, motivation, and support I have received from my wife Elizabeth and my sons Elijah, Isaac, and Silas. Elizabeth has buoyed me in so many ways through this process. She has been patient, understanding, encouraging, patient, motivating, compassionate, and patient through it all. I am sometimes hard to tolerate and love, yet she has done so in ways too numerous to mention and for which I am forever grateful. My boys not only accepted my frequent long absences weekday evenings and weekends while I was writing, they volunteered to me on a regular basis that they were okay, that we were okay, and that they were happy for me. This journey is finding conclusion because they willed it so.

Dedication

This dissertation is dedicated to my parents, David and Joan Leer. Even to this day, my parents will regularly remind me that, in their memories, I was always a kid who, when he put his mind to something, would find a way to get it done. Not only are they the reason I am here, they are also the reason I am *here*.

Abstract

I focused this study on the process of course selection by minoritized populations in high schools with new diversity to illuminate potential reasons and solutions for the continuing disproportionality between school demographics and the number of minoritized students taking and *succeeding* in advanced courses. I used a two-site case study design and investigated two public high schools in peri-urban communities in the Upper Midwestern United States.

By understanding the obstacles that keep minoritized students from enrolling in and having success in advanced coursework, particularly in schools with smaller and newer minoritized student populations, educators will be better equipped to identify those obstacles in their context, and determine a way to eliminate them for the benefit of all minoritized students.

The results of this study showed that the effort to shrink and potentially close the opportunity gap in advanced high school coursework needs to focus on the following: making minoritized students comfortable at school and leveraging that comfort to move more students into advanced coursework; recognizing how the concept of access to advanced courses is perceived by students and staff, and using that understanding to better inform efforts to make advanced coursework truly accessible to minoritized students; understanding the full impact of student-teacher relationship on student's willingness to pursue advanced coursework; getting teachers to acknowledge the attitudes, perceptions, and biases they hold and how those can shrink or grow the gap; recognizing how school systems and culture impact the school pathways of minoritized students, and using that understanding to better shape those systems as a mechanism of

support for minoritized students in advanced coursework; understanding what does and does not motivate students, and using that knowledge to more effectively move minoritized students to advanced coursework.

Table of Contents

List of Tables	vii
Chapter 1	1
Statement of the Problem	
Chapter 2	10
Review of the Literature	
Chapter 3	39
Methodology	
Chapter 4	55
Findings	
Chapter 5	116
Conclusion	
References	145
Appendices	159

List of Tables

Table	Page
1 Student Participants	49

Chapter One

Statement of the Research Problem

I've got all these 9th grade students, I've got a chunk of them that should probably be in honors or accelerated math and what I am continually astounded by is the proportion in that little chunk that is black or brown. It's astronomically high. I think in the past three years I have one boy who I could identify as white who should have been in honors. Otherwise, they are all black or brown kids. And I think that's a testament that we're failing them.

-Val, HJHS Math Teacher, 2018

If a teacher is willing to work with you, there is nothing you can't learn.

-Desiree, MSHS Student, 2018

Val and Desiree, two of the individuals who participated in this study, may very well capture the essence and need for this study in just a few words better than I could in a dozen pages. We are not closing the gap for minoritized students when it comes to them enrolling in and completing advanced coursework. Desiree sees a way toward learning without limits. But the truth is, we as educators are not serving the needs of students like Desiree, a minoritized student at her school, optimally, because we look at realities like the one Val describes and beyond a thorough job of admiring the problem, we are not taking purposeful steps, at the classroom, building, or system level, to solve it. It is my profound hope that this study interrupts that pattern and provides educators in schools similar to Horace James High School and Mason Springs High School the knowledge and motivation to act, and in doing so, begin closing the advanced coursework opportunity gap for minoritized students in their schools.

I started my career as an educator almost 30 years ago, and every stop on my career journey, both as a classroom teacher and administrator, has been in a school where Black, Indigenous, and people of color, if present at all, were *an extreme* minority. It is perhaps coincidental that the schools and districts which hired me were consistently and dominantly white; regardless, my stops along the way to my current position were not districts with demographics that demanded change in the limited access to rigorous coursework available to black and brown students.

Frankly, I must admit that the concept of cultural diversity, let alone an awareness of the existing discrepancy in educational access between white and minoritized students, was somewhere between an abstraction and an unknown for me until relatively recently. I grew up and attended high school in an overwhelmingly white community, and subsequently attended a small mid-western liberal arts college that was equally so. The parade of dominantly white secondary schools in which I taught after college did little to accelerate my awareness and understanding of the issues facing minoritized students in the types of settings I had moved through as a student and teacher.

Graduate school began to expose me to black, brown, and indigenous writers, and perhaps a blossoming understanding of the experience of being culturally diverse in a country whose systems were designed and run by whites. Even with a decade of teaching and a master's degree in hand, however, I didn't fully understand the scale of the opportunity gap: how much my white privilege afforded me, and the degree to which not having it affected minoritized students' opportunity, not only in urban centers where minoritized populations were large, but also in school like those in which I'd spent time professionally, where minoritized students were few and far between, or certainly, the

minority. I know now my ignorance and lack of understanding was my own doing.

Equity of educational opportunity has indeed long been a critical issue facing schools in Minnesota and across the nation (e.g., Klopfenstein, 2004; Handwerk, et. al, 2008; Cora, et. al, 2011; Walker, 2002). One area where the opportunity gap is particularly problematic is access to or participation in Advanced Placement (AP) coursework at the high school level (e.g., Klopfenstein, 2004; Handwerk, et. al, 2008; Kerr, 2014; Walker, 2002). While some high schools have made it a priority to increase AP enrollment of minoritized populations (e.g., Walker, 2002; Kerr, 2014; Superville, 2016), the problem still persists and its impact goes far beyond high school.

Access to high rigor high school courses can have a dramatic positive effect on the success of minoritized students when and if they matriculate to higher education, to the point where they perform equally to their higher income white peers (Cisneros, Holloway-Libell, Gomez, Corley, & Powers, 2014). And access alone, regardless of the degree of success reached in those classes, leads to a significantly higher rate of persistence in college among minoritized populations (Klepfer & Hull, 2012).

Approaches to solving this imbalance include assuming a deficiency in instruction among teachers and providing them tools to be more effective with minoritized students (e.g., Ketelson, 2017; Brookhart, 1993; Means & Knapp, 2017; Kyburg, et. al, 2007), working with teachers to change their beliefs and assumptions about the capabilities of minoritized students (Dweck, 2016), offering incentives to minoritized and low-income students who enroll (Klopfenstein, 2004), implementing a simple quota system to ensure demographic balance (Samuels, 2017; Superville, 2016), removing previously implemented restrictions that inadvertently, or perhaps purposefully, excluded all but the

more socioeconomically advantaged students (Blume, 2017), or even utilizing outside entities to identify qualified minoritized and low-income students to add to AP course rosters (Theokas & Saaris, 2013; Superville, 2016).

While the overall body of research is deep, there are deficiencies in two areas: first, little attention has been paid to the beliefs, experiences, and perceptions of the minoritized students in their course selections, as well as the beliefs *about* them, that ultimately lay the foundation for the existing opportunity gap; second, the vast majority of the research focuses on schools where minoritized populations are large--in some cases, the majority, and where those populations are long-established, as opposed to schools where the diversity is part of relatively new ethnic and cultural diasporas which have largely developed due to processes of globalization.

I focused this study on the process of course selection by minoritized populations in high schools with new diversity to illuminate potential reasons and solutions for the continuing disproportionality between school demographics and the number of minoritized students taking and *succeeding* in advanced courses. My research questions included the following:

1. What are the beliefs, experiences, and perceptions of minoritized students at three Minnesota high schools with new diversity in regard to course selection?
2. What role do teacher beliefs and perceptions play in the course selection process of students from minoritized groups?
3. What role do school supports play in ensuring that students from minoritized groups enroll in, and have adequate supports to succeed in, advanced courses?

4. How can an understanding of these experiences help schools increase participation and ensure success for minoritized students in advanced level coursework?

In addition, four primary bodies of literature informed this study:

1. *Research on non-cognitive factors related to student success*

How a student views his or her capacity for future college or career success is an important component of the achievement gap discussion. Several researchers examine non-cognitive factors, or as Peter Demerath describes them, “components of academic mindsets” (2017) as important to the discussion of gap reduction: grit (Duckworth, 2016; Robertson-Kraft & Duckworth, 2014; Demerath, 2017; Tough, 2012 & 2016), growth mindset (Dweck, 2016 & 2016; Demerath, 2017), hope (Duncan-Andrade, 2009), and sense of belonging (Baumeister & Leary, 1995), among others.

2. *Equity and privilege as they relate to race and socioeconomic status*

Some of the research notes that If one walks into an AP, IB, or other advanced course classroom, one will generally see that black, Hispanic, and low-income students simply aren’t there (Kerr, 2014; Theokas & Saaris, 2013; Quinton, 2014). Other research verifies that white students *enroll* in advanced courses at a significantly higher rate than do minoritized students (Klopfenstein, 2004; Ralston, 2017; Corra, Carter, & Carter, 2011; Deruy, 2016), supporting the assumption that the problem is less about minoritized students not succeeding in those courses than it is about them not attempting those courses. Still other research examines this disparity through a lens that uses current enrollment data,

and the tracking it creates, to draw comparisons to historical segregation in our country (Walker, 2002; Kohli, 2014). All of these illuminate how access to advanced coursework is clearly not equitable in our schools despite research that sees enrollment in advanced coursework by minoritized and low-income students as an effective instrument for serving these students (Oberjuege, 1999; Schneider, 2009), and has for decades (Marland, 1976).

3. *Teacher beliefs and practices*

Some researchers focus on instructional strategies teachers can use to improve the performance of minoritized students (Means & Knapp, 1991; Ketelsen, 2017; Brookhart & Rusnak, 1993). This includes research on effective strategies for moving minoritized and low-income students toward higher order thinking skills (Brookhart & Rusnak, 1993) and closer to advanced coursework, as well as research that examines teaching strategies that effectively support minoritized students once they are in the advanced classroom (Ketelsen, 2017). Other researchers acknowledge that attention must be paid not only to the way teachers *instruct* minoritized students and students in poverty, but also the *beliefs* they have about their backgrounds, capabilities, and limitations (Walker, 2007; Dweck, 2016 & 2016; Brookhart & Rusnak, 1993; Demerath, 2017).

4. *Systems of support: school policies, procedures, practices, and programs*

Some of the research examines schools that have simply changed their thinking about who and how they enroll students in advanced courses (Ketelsen, 2017; Blume, 2017; Samuels, 2017). Some look at programs where there is an insistence on quotas to bring the advanced course demographic even with that of the

building (Superville, 2016; Kerr, 2014; Rich, 2013). And other research highlights systems where minoritized and low-income students are provided layered support as they move through the advanced coursework to ensure they arrive successfully at the conclusion of the course (Kerr, 2014; Oberjuege, 1999; Superville, 2016; Roegman & Hatch, 2016).

By understanding the obstacles that keep minoritized students from enrolling in and having success in advanced coursework, particularly in non-urban communities where the growth in diversity is relatively recent and still represents a small proportion of the overall population, educators will be better equipped to identify those obstacles in their context, and determine a way to eliminate them for the benefit of all minoritized students.

Data from this dissertation suggests that contrary to a number of educational initiatives, the effort to shrink and potentially close the opportunity gap in advanced high school coursework does not require expensive, extensive training of additional resources. The effort needs to focus on the following:

- Making minoritized students comfortable at school and leveraging that comfort to move more students into advanced coursework;
- Recognizing how the concept of access to advanced courses is perceived by students and staff, and using that understanding to better inform efforts to make advanced coursework truly accessible to minoritized students;
- Understanding the full impact of Student-Teacher Relationship on student's willingness to pursue advanced coursework;

- Getting teachers to acknowledge the attitudes, perceptions, and biases they hold and how those can shrink or grow the gap;
- Recognizing how school systems and culture impact the school pathways of minoritized students, and using that understanding to better shape those systems as a mechanism of support for minoritized students in advanced coursework;
- Understanding what does and does not motivate students, and using that knowledge to more effectively move minoritized students to advanced coursework.

These efforts will prove paramount to any school's efforts of shrinking or closing the opportunity gap in advanced coursework between white and minoritized students.

Overview of Chapters

In Chapter Two, I present a review of the existing literature that allowed me to focus and better frame my research. I organized this chapter into three main headings: School Systems of Support; Teacher Beliefs, Perceptions, Expectations, and Practices; and, Student Academic Mindsets. I concluded with an explanation of my study's contribution to the literature.

Chapter Three is a detailed summary of the methods I used to execute the study. I describe my research design, the two settings for the study, the student and adult participants, the data collection strategies and procedures, data analysis procedures, and the study's trustworthiness.

I present my study findings in Chapter Four. This chapter presents an explanation of the three data sets used in the study, and a presentation and analysis of the data

organized into six major themes: Being Comfortable at School, Access, The Student-Teacher Relationship, Teacher Attitudes, Systems and Culture, and Motivation.

In Chapter Five, I summarize the study, reiterate and answer the research questions that drove the study, and share a general discussion of the findings across the six major themes presented in Chapter Four. I then discuss the limitations of my study, and the Implications for Policy and Practice of my study, which are organized under three headings: Teachers; School Leaders; and School Systems. Finally, I conclude this chapter with implications for further research.

Definitions

For the purpose of this study:

Gap will be defined as the persistent presence of different average opportunity and achievement levels between minoritized and non-low-income white students.

Minoritized is a term as Khalifa (1998) describes, “that signals active historical and current oppression that these students face” (p. 193). Minoritized students face reduced educational opportunity due to their status as minority, low-income, or English Language (EL) students, a status placed upon them, not chosen by them.

New Diversity will be defined as diversity that is less than one third of the overall student population and is part of relatively new ethnic and cultural diasporas which have largely developed due to processes of globalization.

Peri-Urban will be defined as communities with a population of over 10,000 people that have been established adjacent to or within a short distance of major urban areas, but lie beyond the outer-most suburban communities.

Chapter Two

Review of the Literature

This chapter reviews current literature related to the participation gap in advanced high school coursework between white students and minoritized students—especially students that are part of a newer student diaspora in the Midwestern United States. This chapter also seeks to determine why the gap exists and what interventions, policies, and practices might aid in closing it.

Decades of globalization and migration to urban economic centers across our country have resulted in schools with large, long-established populations of minoritized students. Much of the research regarding access to and success in advanced coursework has focused on these urban schools where the minoritized populations are not only long established, but also are a high percentage of the overall school populations. Little research, however, has focused on strategies to improve access in high schools in mid-sized communities with new diversity. The reason for this gap in the research is three-fold: schools with new diversity don't have systems in place to work with their new diversity, lack an understanding of how to work with the new diversity, or simply choose not to address the difference in access.

Evidence of Gap in Access

There is no shortage of data illustrating the extent of the problem. In their 2013 examination of national patterns in student enrollment in advanced coursework, Theokas and Saaris conclude that American schools are currently missing 640,000 minoritized students in advanced level coursework (2013). A year later, Quinton's analysis showed that Black and Latino students made up 37 percent of high school students but only 27

percent of student taking an AP class and 18 percent of students passing AP exams. She went on to explain that minoritized students are less likely to go to high schools that offer a college-prep curriculum. In fact, 25% of black and Hispanic students don't even have access to algebra 2, a typical requirement for college math and science courses, let alone Advanced Placement courses (2014). The College Board's most recent *AP Report to the Nation* provides a similarly sobering reality: 7 of 10 black students and 6 of 10 Latino students who demonstrate high potential for success in AP courses didn't take one (2014).

There are a number of reasons this may be the case, but VanSciver, in his analysis of the problem in one school district in Delaware, highlights one particularly ironic conclusion. Minoritized students, he found, were being led to, and choosing, low-rigor courses where they could achieve higher grades, please their parents, and create for themselves a high school transcript that suggested they were capable of college success (2006). While this was satisfying for them at the time, it made them “woefully unprepared for the rigor of work that will confront them during their freshman year of college. Ironically, although this behavior will get them into college, it will deny, for most of them, a college degree” (p. 57). These students and their parents, as a result of their low-rigor high school success, envision themselves headed to an equal level of success in college, but that vision is based on the myth that their high school experience prepared them for whatever rigor college had to offer.

Impact at the College Level

High rigor in high school courses, on the other hand, can have a dramatic positive effect on the success of minoritized students when and if they matriculate to higher

education. In a study of schools across the state of Arizona, for example, Cisneros, Holloway-Libell, Gomez, Corley, and Powers acknowledge that “even after controlling for student background and prior academic performance, students who participate in AP courses and exams tend to perform better on a range of college outcomes than their peers who do not take AP courses”, so much so that the college persistence rates of minoritized students who had taken AP courses were very similar to those of their higher income white peers (2014). Klepfer and Hull, in their 2012 study of factors that influence college success, concluded that students who simply *took* AP courses, even if they failed the exam, were dramatically more likely to persist in college. The increased likelihood of persistence was most significant for low-income and previously low-achieving students, and increased further with each AP course they completed, regardless of previous low achievement or socio-economic status (2012).

In attempting to determine why the gap exists and what interventions might aid in closing it, this review will consider three primary bodies of literature: research on school systems of support and their impact on minoritized student access and success in AP courses; research on teacher beliefs, perceptions, expectations, and practices that affect student access and success in AP courses; and, research on student beliefs, dispositions, and practices as they pertain to advanced placement course participation and success.

School Systems of Support

As Michael Madrid (2011) acknowledges in his analysis of achievement by Latinx students in California, the learning and opportunity gap between minoritized learners and other students is a complex problem, the solution for which will not be found in a specific program, intervention, or curriculum. Research shows that the causes of the

problem are varied and plentiful (Garcia & Cohen, 2011), but do not include minoritized students being inherently less capable. School structures and systems themselves, however, and the social tension they create, bear some of the responsibility for the lack of minoritized students enrolled in advanced-level coursework.

Research confirms that regardless of a student's potential to learn, his or her ability to succeed academically is as much determined by social, cultural, and economic influences (Corra, Carter, & Carter, 2011; Lidz & Macrine, 2001). Garcia and Cohen, in their psychological study of educational interventions, assert that schools sometimes contain forces—a lack of resources or a threatening environment, that make it difficult or even impossible for minoritized students to be successful (2011). Multiple studies confirm at least one piece of Garcia and Cohen's conclusion, that minoritized students are less likely to have access to quality preschool, quality veteran teachers, and adequate or equitable funding (Flores, 2007; Madrid, 2011).

Identification of Students

Lidz and Macrine's research points to a flaw in the way schools identify which students are "gifted" and which are not, suggesting that most approaches are too narrow to be inclusive of all learners. They claim that minoritized students should not and "cannot be expected necessarily to manifest their giftedness in the same way as children from backgrounds more compatible with their classroom experiences" (Lidz & Macrine 2001, p. 75).

Instead, their research concludes the need for "dynamic" assessment. Dynamic assessment follows a pre-test, intervention, post-test sequence, in which "the assessor intervenes to help the learner understand the basic principles of task solution, and to

proceed in a strategic, self-regulated style” (p. 76). As a result, the post-test is weighed most heavily in consideration of advanced programming. Significant research confirms Lidz and Macrine’s conclusion regarding the potential effectiveness of dynamic assessment (Hickson & Skuy, 1990; Skuy et. al, 1988), including research as far back as the 1970s (Sewell, 1979; Sewell and Severson, 1974), and studies involving EL students (Lidz, 1997; Lidz & Macrine, 2001). It must be noted, however, that a significant amount of this research was specific to assessments given to elementary-level students, as opposed to students at the secondary level. Nevertheless, this research is important to the pursuit of gap closure, given the wide understanding that the gap is created long before students begin selecting their high school courses.

Other research steers clear of normative assessments altogether. Walker and Pearsall suggest that schools must stop relying so heavily on standardized assessments and turn instead to “multicultural and multimodal measures of high potential” in order for advanced course class lists to be more equitable (2012, p. 13). Their conclusions stem from research which points to definitions of “high potential” which include qualities like creative thinking, leadership capacity, artistic ability, psychomotor ability (Oakland & Rossen, 2005), persistence, resilience, and self-management (Lohman, 2005).

One could wonder why sixteen years after the Lidz and Macrine’s study, schools still seem so far from a system that uses equitable criteria for identifying or including a more diverse selection of students. Sadly, the awareness of a need for alternative criteria goes back even further. Richert concluded over 30 years ago that schools need to go beyond traditional methods in identifying minoritized children for advanced or gifted

programs (1985). Shortly after, Frasier and Passow (1994) suggest a selection process that considers how race, culture, caste, and socioeconomic status influence behavior.

Be it their inability to recognize different forms of giftedness, their decision not to, or their lack of awareness of the varied gifts students bring to the academic arena, schools are complicit in exacerbating learning and opportunity gaps, and setting minoritized students on a trajectory that makes the gap widen each subsequent year of formal education.

Coupled with an awareness of Garcia & Cohen's conclusion that minoritized students are not less capable (2011), the fact that schools do not, in larger numbers, consider alternative selection methods and implement better systems of supports for minoritized students would suggest that schools are either *indifferent* to more diversity in advanced courses, or *unwilling* to invest the extra effort in making sure all students have equal access to the opportunity. While this conclusion may seem severe, it's hard to refute given the lack of action in the shadow of such significant research (Oakes, 1995).

Impact of Low Numbers of Minoritized Students in Advanced Courses

In a real-life example of the impact of a school system's lack of support, Walker's analysis of a larger high school in suburban Colorado reveals that while 60% of the student body was minoritized, 75% of students in advanced courses were white (2002). The main reason: staff in the building were discouraging minoritized students from enrolling, or misinforming them about the courses. The result, of course, was a lower level "track" of courses populated by minoritized students (Walker, 2002). The school did take action, including monitoring the messages students were getting and making sure that all students were encouraged to take the most challenging courses (Walker, 2002).

But the work clearly has to go further than encouraging students to take advanced coursework. Minoritized students need to be able to look around and see that they are in a mix of students that is more than simply satisfying a quota. Those students, regardless of how apt they feel academically, may decide to leave for strictly social reasons (Walker, 2002).

A similar study at a predominantly Latino high school reinforces Walker's Colorado research with an even more stark reality: a 62% Latino student population had only 14% of those Latinos represented in AP coursework. Students described feeling isolated and separated from their culture and culturally similar peers. The mostly white teaching staff at the high school described the AP environment as unwelcoming to Latino students. The district was "noticeably lacking" in any professional development geared toward giving white teachers the tools to identify academically gifted Latino students (Walker & Pearsall, 2012).

The research in this section points to a broader concern about the nature of advanced coursework and diversity: advanced courses, particularly in formal programs like Advanced Placement (AP), have contributed to the deepening of the racial and socioeconomic divide within schools (Walker, 2002). In other words, not only is the current underrepresentation of minoritized students in advanced level coursework widening the achievement gap, it's also widening the social gap among races and social classes.

Support Structures

The way schools structure their systems of support for minoritized students is also a critical factor to lessening or eliminating the gap (Dubner, 2008). As an example,

Garcia and Cohen describe a classroom setting involving two students at the same ability level who experience failure. One has been a part of a school system that has helped her build high self-efficacy and as a result, her response to the experience is increased determination. The other has been a part of an adverse academic environment that stunted her self-efficacy so she gets further discouraged (2011). Dubner would assert that good school support structures would intervene by recognizing and addressing the second student's psychological functioning issues. This in turn would decrease the likelihood that students would doubt their ability to succeed in school, see their intelligence as a fixed quality, give up, or persevere in ineffective strategies (Garcia & Cohen, 2011). Steele, Aronson, and Spencer (1995) agree that schools which work to alter a student's psychological environment can alter that student's academic performance. Similarly, Immordino-Yang's work on emotion and learning points to the importance of structures that focus on students' emotional well-being, social relationships, safety and belonging, and *cultural* well-being. Focusing on the brain and the negative cognitive effects of stress, trauma, loneliness, and other factors related to the lives of minoritized students, she emphasizes that supportive relationships in school programs, both at the classroom, building, and district level, can significantly buffer students from those stresses and open a pathway to cognitive development and higher levels of learning and academic capacity and achievement (2018).

The connection between the school and a student's home environment is another important component of support. Whether it be simply an awareness of the physical home environment, an effort to understand the culture from which the student comes, or an acknowledgement of how the home environment impacts the student's ability and

motivation, the school must work to cultivate that connection. As Gillock and Reyes point out (1999), this connection allows students to more easily feel socially supported at school, and more comfortable in turning to school personnel in times of stress.

Minoritized families are often “rendered powerless” in their capacity to support their children (Munsch & Wampler, 1993), because they must deal with their own stresses.

This makes the school’s effort to fill the void that much more important to the student’s academic support. A simple way to forge that connection with parents is to meet with them. Research shows that parent and family support is a critical component to student success, and even more critical in the advanced course setting. Schools need to familiarize parents with the advanced curriculum, the higher expectations, and the ways parents can support and assist their students in their academic endeavors (Flores & Gomez, 2011).

In some cases, the research would suggest that perpetuation of the advanced course enrollment gap at the school district and building level is the result of institutional bias. Oakes (1995) found, in one example district, that far fewer minoritized students took advanced courses than white students even when test scores across the two groups were identical. She noted that Latinos were nearly 40% less likely to be enrolled in advanced coursework than white students. In contrast, Kitchen describes schools that provided their teachers instructional resources and professional development emphasizing support of minoritized students. The result was high achievement across all student groups (2007).

Intentional Efforts

Recent research is ripe with examples of schools and districts, like the one in Colorado, that have been intentional about efforts to increase the percentage of students taking, and successfully completing, advanced coursework (Blume, 2017; Kerr, 2014; Ketelsen, 2017; Rankin, 2012; Rich, 2013; Roegman & Hatch, 2016; Superville, 2016). Schneider asserts that AP courses are the most rigorous courses available to high school students, and that lower grades in AP courses, as opposed to higher grades in “regular” courses, correlate with a higher rate of college acceptance among selective colleges (2009).

In New Jersey, in response to such research, several districts made changes to increase enrollment in AP and other advanced courses (Roegman & Hatch, 2016). For one district, that meant removing any and all selection criteria, quotas, and application processes in favor of an open enrollment system where every student who wanted an advanced course would get it. In addition, teachers in that school were required to attend workshops where they received training on how to teach advanced courses and how to work with first-time AP students. Another district eliminated lower-level courses altogether and had all students enroll in advanced courses to fulfill their core requirements. These strategies across the schools increased teacher expectations of first-time AP students, and substantially increased the number of students taking AP courses. More importantly, it did so without revealing a discernible drop in AP test scores—a concern many parents voiced in response to the implementation of these strategies (Roegman & Hatch, 2016).

A third district developed a summer program designed to prepare all students for the rigors of advanced coursework. And while not intentional, this program actually helped teachers who participated raise their expectations of students who were not “traditional” advanced course students (Roegman & Hatch, 2016). Enthusiasm should be tempered, however. Roegman and Hatch’s research showed the initiative placed sufficient emphasis on *access*, but not enough on *equity*. Too often, new programs, policies, and procedures sold on the notion that they will close the gap end up maintaining or even widening it. In this case, while *overall* advanced course enrollment increased substantially, the percentage increase of minoritized students in the study still fell significantly short of each school’s demographics (2016). Gap closure initiatives must incorporate intentional efforts to ensure that the increased enrollment prioritizes minoritized students.

San Diego Schools, by contrast, were intentional about increasing the enrollment of minoritized students in advanced courses (Superville, 2016). They hired an organization called Equal Opportunity Schools (EOS), which helped them identify nearly 1900 students who they believed could be successful in advanced coursework but weren’t already enrolled. EOS does this by examining school data, interviewing staff and students, and preparing profiles of capable students, which give schools a more complete description of learners than do standardized assessments. The search forced San Diego educators to think beyond a standardized test score as the means of identifying qualified students and gave them a specific list of qualified minoritized students to pursue for advanced level coursework (Superville, 2016).

The theme here is that schools must go beyond expanding access. Any school can place more students of any type in advanced courses and meet an arbitrary quota. The real work of change is making sure students have the tools they need to persevere and succeed. In San Diego, that meant adding English/Language Arts tutoring, hiring a professional-learning coach, and improving professional learning opportunities for teachers that gave them the tools to better instruct minoritized students in advanced level courses (Superville, 2016). In other districts, that might mean developing courses that are essentially preparation for advanced courses, with an increase in rigor enough to get minoritized students ready for that next step into advanced, honors, or AP coursework (Flores & Gomez, 2011).

Kerr presents a study of an urban high school in Kansas grappling with a similar dearth of minoritized students in advanced level courses. Her exit interviews with non-white students revealed that those students noticed the “overly white complexion” of advanced courses and believed that they were designed for white students only. Furthering the issue was evidence suggesting the school was doing very little to change that perception (2014). School staff seemed content with admiring the problem and not overly concerned with finding a solution.

In response, Kerr asked school staff—specifically social studies department staff, to change their approach to identifying students for advanced coursework. Teachers were asked to first identify students for advanced courses as they had before, but then were required to explain the reason behind each non-recommendation: behavior issues, attendance issues, academic ability concerns. A series of follow-up questions were then considered that required teachers to consider what could be done to change the

recommendation. Vertical teams were then created to help teachers align instructional methods to ensure that all students got what they needed to advance their skills, and increased their likelihood of being selected for advanced coursework in subsequent years (Kerr, 2014).

Like New Jersey, however, the Kansas school applied inadequate emphasis to their minoritized students, a frankly disconcerting fact given that they represent a two-thirds majority of the overall student population. And like New Jersey, the school saw a significant increase in advanced course enrollment, but minimal gains in the enrollment of minoritized students, confirming the conclusion from San Diego that schools cannot stop at expanding access.

Kerr falls short in her analysis of the Kansas study as well. In it, she concludes, “advanced class student enrollment needs to be based entirely on the individual student’s knowledge and skills, not the color of the student’s skin” (p. 487). The Kansas study, as well as the New Jersey study, actually demonstrates the opposite truth: schools must be alert to minoritized students and the contexts they bring to the discussion. That the efforts in both districts significantly increased overall enrollment but negligibly increased minoritized student enrollment affirms that more attention must be paid to each individual student, not less.

Systems must be intentional about identifying minoritized students and low-income students for advanced courses, and a system of ongoing support must be implemented to ensure their success. Andrew Rotherham asserts, “Holding schools accountable for student learning is neither punitive nor unfair” (Dubner, 2008). The data clearly acknowledges that participation in advanced coursework greatly increases the

likelihood of graduating from high school and being successful in college (Gamoran, Nystrand, Berends, & LePore, 1995; Smydo, 2007), so making changes that maximize participation and success of minoritized students in advanced coursework is key to closing the gap.

Teacher Beliefs, Perceptions, Expectations, and Practices

Equal to the body of research on school systems of support in closing the gap is the research focused on the support that teachers provide these students within those systems. Academic achievement of minoritized students is influenced heavily by individual teacher support, and that support is influenced heavily by teacher quality, teacher expectations, and how teachers perceive minoritized students (Florez, 2007; Madrid, 2011). Dubner (2008) states it simply: “Good teachers can actually close or eliminate gaps in achievement.” It is important to emphasize, however, that it is as much about the belief system teachers bring to the instruction of minoritized students, as it is how they teach them.

Teacher Perceptions of Minoritized Students & Self-Efficacy

Chenoweth and Theokas emphasize that the successful teachers they studied in impoverished schools were “unwavering” in their belief that all students could be successful, and it was up to the teachers to make that belief a reality (2013). They are not alone in this conclusion or evidence to support it (Demerath, 2017; Flores, 2007; Ketelsen, 2017; Klopfenstein, 2004; Means & Knapp, 1991; Quinton, 2014; Robertson-Kraft & Duckworth, 2014). These teachers also consistently focus on students’ talents and not their academic weaknesses (Walker, 2007).

In contrast, however, are studies that cite schools in which teachers essentially give up on minoritized students or assume them to be less capable from the start, believing their struggles are the result of laziness, and lack of discipline, care, or family support, (Ferguson, 2003; Flores, 2007; Gaitan, 2012; Madrid, 2011). Worse, other studies point to a more insidious theme nationally of teachers keeping capable minoritized students from accessing advanced courses with the use of discriminatory entrance processes or because of their deeply entrenched perceptions that further disadvantage already disadvantaged students (Blume, 2017; Kohli, 2014; Rich, 2013; Walker, T., 2002). Kohli highlights an east coast high school where a minoritized student was unable to obtain the necessary teacher recommendation for advanced coursework in spite of her academic standing clearly indicating her capacity for rigorous coursework. Not until the student's father threatened a lawsuit did the school relent and allow her to enroll in advanced courses. Advanced courses in this school could be identified simply by noting the heavily white racial composition, a bitter irony for the minoritized students in the school who made up a 51% majority of the student body (2014).

The key to moving from belief to reality, however, requires more than just belief in students. Multiple research studies spanning the last 30 years conclude that equally important to student success is a teacher's belief in *him or herself* (Ashton & Webb, 1986; Ebmeier, 2003; Goddard et al., 2004; Gu & Day, 2007). In his examination of the test score gap between black and white students, Ferguson suggests that teacher bias toward minoritized students was, in many cases, a consequence of low expectations for themselves as instructors (2003). Indeed, teacher efficacy is a critical component to learning in the classroom. Robertson-Kraft & Duckworth, in their study of teacher

effectiveness and retention, explain that teacher efficacy has a direct correlation with high levels of instructional performance in the classroom (2014). Similarly, many other studies have found a strong correlation between student achievement and teacher efficacy, both individual and collective (Bandura, 1993; Goddard & Goddard, 2001; Tschannen-Moran and Barr, 2004; Ramos et. al, 2014). More specific to this study's focus on minoritized populations, Sandoval et al. (2011) found that teacher efficacy positively impacted student achievement in economically disadvantaged schools and did so regardless of student background or socio-economic status.

And yet, teachers in large numbers believe their ability to impact learning has more to do with the students in their classes than it does their instructional capacity. Nearly half of a group of teachers surveyed in 2008 agreed, "their classes are too mixed in terms of ability for them to teach effectively" (Kohli, 2008). Teachers also need to be willing to put in *time*. In one school where advanced level academic success was realized in spite of its high-poverty high-minoritized population, teachers spent an hour each week, reviewing research relevant to problems they were encountering with student learning, and putting their learning into practice in the classroom (Chenoweth & Theokas, 2013). Then, based on assessments given to the students in their classes, they would evaluate the effectiveness of those practices and modify as the data suggested was necessary.

Teacher Expectations and Support of Students

Minoritized students are certainly more likely to face, in the words of Michael Gerson, the "soft bigotry of low expectations" (Johnston, 1999, p. 18). To Gerson's point, Garcia and Cohen indicate that students who start school with better academic

preparation may, as a result, receive more opportunities and have placed upon them higher expectations (2011). Their lesser-prepared counterparts, conversely, battle low expectations and are seen as less capable and less deserving of support and attention. The result is a system where lower-achieving students perform to their level of expectation, and in doing so, reinforce teacher expectations.

Kitchen, in his analysis of high achieving schools (2007), finds instructional commonalities in classrooms where minoritized students were successful. Teachers consistently had high expectations of minoritized students and offered sustained supplemental support to them. They also regularly reviewed basic academic skills that students had learned in the past. Kitchen's study echoes the work of Walker (2007), and Means and Knapp (1991) who advocate for a similar duality of instruction. They cite a long-held misconception that disadvantaged students first must master "the basics" before any effort can be made to provide them advanced level coursework. The resulting instruction, they argue, actually exacerbates the gap. As these students receive basic skills, their more advantaged peers are being taught higher-order thinking, causing them to surge even further ahead. Instead, disadvantaged students should receive instruction in the basic skills that *simultaneously* asks them to apply what they know, solve problems, analyze results, and challenge assumptions (Means & Knapp, 1991; Walker, 2007).

High expectations of students, particularly those who are novices in advanced level coursework, also require teachers to work harder. The teachers at one California high school offer tutoring sessions during lunch, after school, and on weekends (Rich, 2013). A similar setup exists at a high school in Oregon, where teachers are intentional about casting a wider net for students who previously had not taken an AP course, and

then equally intentional about taking whatever time necessary to ensure minoritized students were successful (Ketelsen, 2017). At a third school, teachers scheduled pre-course meetings with students to talk about their “success potential,” and developed an intensive 2-week summer program to front-load social and academic interventions for students new to the advanced coursework trajectory. In addition, teachers at this school were committed not only to proactive supports, but also to a close monitoring of student progress. Students who fall behind would receive interventions not only in course content, but also in time management, organization, and study skills (Davis, Davis, & Mobley, 2014). Klopfenstein puts it bluntly when she says, “You really don’t have access for traditionally underserved students unless you have sufficient supports for them while they’re taking [advanced] courses” (Quinton, 2014).

Flores (2007) explains that teachers also need to utilize materials and approaches that allow students to learn cooperatively rather than competitively. This plays into the *cultures* of minoritized students, particularly minoritized students, as much as it does their learning styles. Walker agrees that a supportive group culture is key to helping minoritized students realize success in rigorous courses, pointing to several institutions that share that common thread (2007). And particularly for first-time advanced coursework students, Ketelsen describes a successful learning environment in which “each student feels engaged and welcomed [with] a tone that promotes participation, learning, and growth” (2017). Research also emphasizes the importance of teachers using a student’s existing support network to cultivate success in advanced coursework (Brookhart & Rusnak, 1993; Walker, 2007), including other teachers, peers, parents, and siblings whose encouragement and support can be impactful.

In summary, research that supports the teacher as the most important factor in a student's success is plentiful. That same research makes clear that participation and success in rigorous, advanced level coursework by minoritized students is feasible, and directly influenced by the teachers in the classrooms. School systems and individual teachers, working together, are powerful factors in closing the achievement and opportunity gaps for minoritized students.

Student Academic Mindsets

What shouldn't be lost, however, in the opportunity gap discussion is how a student views his or her capacity for success. While much of the research points to the teachers and the systems in which the students are embedded, several researchers examine factors that are part of the student's lotus of control, or as Peter Demerath describes them, "components of academic mindsets" (2017). These studies connect factors such as grit, hope, and sense of belonging and comfort to academic success, but also relate directly to student course selection.

Grit

Grit has received a significant amount of attention in recent years (Demerath, 2017), attributable mainly to the research of Angela Duckworth (2016) and the work of Paul Tough (2012). Duckworth's research began when she was a graduate student and visited West Point. Over the course of many years, she studied the traits that make West Point cadets successful, and concluded that grit, which she defines as "perseverance and passion for long-term goals," is twice as important as talent in contributing to people's future educational and occupational success (2016). Further, Duckworth believes that grit is something that can be developed or taught. Similarly, Carol Dweck's research on

growth mindset, arguably the parent from which grit is born, finds that regardless of social strata, students with a growth mindset achieved academically at much higher rates than their fixed mindset counterparts (2016). As a result, schools across the country have taken up the task of teaching their students “grit” with the hope of it making students more academically successful, particularly those minoritized students who enter school well behind their middle class white peers (Demerath, 2017; Denby, 2016; Dweck, 2016; Golden, 2015; Ris, 2015; Tough, 2016).

In spite of the trendiness of the grit narrative in recent years, much of the research and writing done in response to Duckworth’s work has been critical of what she has posited (Denby, 2016; Golden, 2015; Ris, 2015; Tough, 2016). Tough points out that “for all the talk about non-cognitive skills, nobody has yet found a reliable way to teach kids to be grittier or more resilient” (2016, p. 2), and Denby suggests that all of the subjects Duckworth studied were successful and high functioning, so there is no way to determine if grit was a cause of success or a by-product of it (2016). Tough also believes that there are environmental forces—chronic stress, for example, that render low-income students less likely to have grit, because those forces stunt the growth of the very human functions that help grit flourish. Denby points out that the focus on grit is the result of the desperate realization that, despite all of the work put into closing the achievement gap, we simply don’t know how to educate low-income students (2016). He suggests, “in this context, grit appears as the new hope” (2016).

Golden argues that the grit narrative encourages young people to “see systemic failure as their own” and “masks the deep inequities in educational and other social systems,” (2015, p. 363). Golden’s case study of a 20-year-old student of color working

to get his graduate equivalency sets the stage for a harsh analysis of the grit narrative. In it, he claims that it rationalizes existing social inequities by placing on the minoritized learners the rhetoric of responsibility, and separates them from the very “collaboration and solidarity” they need to repair those inequities (2015, p. 363).

Ris makes a similar point in referencing a recent article in National Geographic, in which Del Giudice describes Duckworth’s research as part of “a shift away from blaming teachers, class size, lack of money, family conditions, and other ‘situational’ factors, which, while important, have increasingly over the past century let the student off the hook” (2015, p. 2). While Del Giudice’s point is advocacy for a social shift back to personal accountability, his line of thinking can lead educators back to a deficit theory mindset, where we identify students by their weaknesses or what they are missing, rather than their strengths. Or as Ris points out, “In one reading, this line of inquiry leads to student *empowerment*; in another, it is simply *abandonment* (p. 2). Ris’ broader point, interestingly, is that Grit defines a quality in human development that *privilege* prevents and isn’t about minoritized students at all: “When poor children appear in this discourse, they are not the problem but rather the romanticized solution. Their status as such is inherently problematic; it does not simply legitimate hardship, it celebrates it” (p. 2).

The legitimacy of grit as an essential trait for success, and its relevance to minoritized students and the courses they take in high school is no doubt up for more discussion. An awareness of its potential impact on these students and the opportunity gap is nevertheless important in our present and future work toward closing the gap.

Hope

In reflecting on his own seminal work *Pedagogy of the Oppressed*, Paulo Freire claims, “to do without hope, in the struggle to improve the world, as if that struggle could be reduced to calculated acts alone, or a purely scientific approach, is a frivolous illusion” (1997, p.8). Further, he describes hope as an “ontological need.” (p. 8). Research since that time reinforces Freire’s claims and confirms that the degree to which a minoritized student has hope for academic success is definitely an important factor in that student’s ability to *be* academically successful. Jeffrey Duncan-Andrade portrays hope as critical for an education that can “relieve undeserved suffering in communities” (2009, p. 181). Abi-Nader describes a program at a Latino high school the success of which is built on the students “keeping the idea of college alive” and consistently using “future-oriented” classroom talk (1990, p. 50-51). Cohen also explains, “The drive for self-integrity-seeing oneself as good, virtuous, and efficacious- is a fundamental human motivation.” (2006, p. 1307).

The issue, then, becomes how to cultivate and grow hopefulness for minoritized students that helps them achieve academic success and, in turn, increases their access to and participation in advanced coursework in school. As it turns out, it may not take a Herculean effort to grow a student’s sense of hope and, in turn, his or her academic achievement. A 2006 study by Cohen, Garcia, Apfel, and Master emphasized this point. It asked teachers to give students multiple writing assignments over a short period of time that focused students on a self-affirming value (2009). A control group, meanwhile, wrote about an unimportant value or a neutral topic. The initial results, and the subsequent follow up two years later were startlingly encouraging. The grades of

African-American students who wrote about self-affirming topics were significantly improved, and the racial achievement gap was reduced by 40% (2006). Two years later, the collective grade point average (GPA) of African American students in the study was .24 grade points higher. Even more dramatic was the average increase among previously low-achieving minoritized students: a .41 improvement over their control group counterparts (2009).

Hope research also emphasizes the importance of our awareness, as educators, of situational threats in the lives of all students, but particularly those our society has minoritized. These threats can adversely affect a student's sense of hope and subsequently, have a tremendous negative impact on intellectual or academic achievement (Cohen, 2006). The threat of deportation for undocumented students would be an example of such a situational threat. Students, who live in fear of being deported, or having their parents deported while they attend school on any given day, have no room to focus on their hope for academic success, let alone room to consider a more rigorous academic experience. And as Cohen explains, situational threats are exacerbated for minoritized students because they are often linked to group identity. In other words, all students can bring situational threats—e.g. a parent's illness—to their school experience, but a threat for a minoritized student is made worse by their status as a minoritized student. (2006)

Further, the research is clear that hope alone is not enough to shrink the opportunity and achievement gaps. Cohen, et al., mention the importance of what they call “adequate material, social, and psychological resources and support to permit and sustain positive academic outcomes” (2006, p. 1309). Duncan-Andrade also

acknowledges the importance of resources not only for growing hopefulness, but also for *creating* it. He even names it “material hope” because it’s born from a teacher’s or school’s willingness to give students things they don’t otherwise have (2009). In other words, academic improvement of minoritized students, while dependent on hope, is also dependent on additional resources to support the development and growth of that hope.

The rub is that the absence of those critical resources is what creates and grows the learning and opportunity gap in the first place, and is exactly what many minoritized students, and the schools they attend, still don’t have. Freire paints this conclusion in stark terms: “The idea that hope alone will transform the world, and action undertaken in that kind of naïveté, is an excellent route to hopelessness, pessimism, and fatalism” (1997, p.8). Duncan-Andrade concurs, going so far as to call such hope “false” and “hokey” for its tendency to ignore the “laundry list of inequities” that impact minoritized young people and the schools they attend (2009, p. 182). An academic improvement plan that places too much emphasis on hopefulness as *the* means, rather than *one component* of the means, will be inadequate at best. At worst, it presents educators as viewing their work with minoritized students through a lens of privilege (Duncan-Andrade, 2009).

Researchers also point to other dangers of a well-meaning overemphasis of hope. Duncan-Andrade (2009) uses the election of Barack Obama as the first black president of the United States to illustrate what he calls “mythical” hope. While Obama’s election is significant, it is and will certainly remain for some time an *exception*. Celebrating it as more than an exception, as opposed to the result of luck or the law of averages, denies the ongoing “tyranny of injustice” and the suffering of minoritized students (p. 184).

Cohen (2006) expresses a similar concern in his discussion of stereotype threat. First used by Steele and Aronson (1995), the term stereotype threat, or collective threat, means a member of a minoritized group is prone to added performance stress if he or she perceives that the existing stereotype of the group will perpetuate or could worsen if he or she performs poorly. A student who relies too much on hope, or is led to see it as the means to success, runs the risk of linking it to their membership in their group. Doing so will increase performance stress and decrease the likelihood that they will perform successfully (Cohen & Garcia, 2005).

Most of the research places the responsibility for cultivating and harnessing hope in the academic lives of minoritized students squarely on the shoulders of educators (Abi-Nader, 1990; Cohen, et. al, 2006; Duncan-Andrade, 2009; Syme, 2004; Wilson, Minkler, Dasho, Wallerstein, & Martin, 2008). Hope in the hands of the adults working with young people is a key partner in the pursuit of gap reduction and more rigorous academic opportunities for minoritized students.

Sense of Belonging and Comfort

An individual's need to belong or to be comfortable has been researched for close to a century, beginning with Sigmund Freud identifying the many ways humans need interpersonal contact (1930). Soon after, Adler posited that failure in school usually stems from students feeling disconnected from their teachers, other students, or the school itself (1939). In the years since, researchers have frequently reinforced Adler's belief, both for the student population in general and for minoritized populations specifically. John Dewey argued that the quality of education "is realized in the degree to which individuals form a group" (1958, p. 65). Goodenow and Grady found that when children, especially

Hispanic students, felt they belonged, their motivation and expectations for success were higher, and they valued the work they did in school more (1993). Both Abi-Nader (1990) and Garza & Santos (1991) attribute this to the value most Hispanic cultures place on community and affiliation as compared to individualism and competition.

Bronfenbrenner (1979) concluded that the relationship between a teacher and his or her students was the *primary* incubator for both learning and human development. More recently, Beck and Malley assert that this is especially true with minoritized students who are already burdened by rejection (1998). Faircloth and Hamm claim that it is essential for all students to develop a sense of belonging at school, and interestingly, indicate that a minoritized student's sense of belonging is further impacted by their perception of how other students respect their ethnic membership (2004).

Beck contends that this connection has become even more critical to the educational process since traditional sources of belonging have diminished for students as a result of changes in family and community demographics (1998). And yet, schools not only appear slow to react to this need, they may be consciously or unconsciously growing the problem. The work of Karen Osterman points out that the national focus on standardized tests is an indicator that academic accomplishment is the top priority. School culture is shaped by individualism and competition rather than community and collaboration (2000). Osterman further argues that schools pay very little attention to the socio-emotional needs of students, a particularly troubling conclusion for students of different races and classes, whose cultures are oftentimes based on the inverse (Garza & Santos, 1991).

As Hamilton suggests (1983), minoritized students tend to be socialized for subordination, while others are socialized for responsibility, a practice which may “exacerbate rather than reduce racial and economic stratification in American society” (p. 332). What educators are left with is a gap that they not only helped create, but are complicit in maintaining or even widening because the structure of the school doesn’t promote the sense of belonging and comfort minoritized students need to be successful in any classes, let alone in advanced coursework.

While Johnson, Wasserman, Yildirim, and Yonai’s study (2014) on the effects of stress and climate on the persistence of students was conducted on a predominantly white college campus and not at the secondary school level, what it reveals is worth noting and in many ways applicable to high schools as well. Their study concluded that many factors related to their status as minoritized students and as the vast minority on campus were directly tied to their levels of stress, the effects of their stress, and ultimately, their willingness to persist as college students. Similarly, these factors are bound to have an effect on minoritized high school students and their willingness to persist in or even attempt advanced coursework. It’s difficult for minoritized students to feel comfortable when they must endure stress related to simply who they are, and that stress certainly has an impact, as discussed earlier in this chapter, on their sense of hope, and their sense of “why bother” with advanced courses.

Faircloth and Hamm are among the few scholars who cast doubt on how important a sense of belonging is to academic achievement among diverse populations (2005). They point to the work of Triandis (1990) which suggests that minoritized cultures, and their emphasis on familial, neighborhood, or community relationships, may

prioritize these contexts over school, limiting the impact of school belonging on academic achievement. They also claim that the research of Gillock and Reyes (1999) suggests high levels of teacher support were unrelated to academic performance, specifically with Latino students. This is a misleading claim at best.

Closer examination of Gillock and Reyes' work clarifies their conclusion: they do not refute the importance of a sense of belonging at school. They, in fact, *emphasize* its importance by pointing out that disadvantaged families are often rendered powerless as a source of support for their children. Their claim, however, is that, in many cases, it is simply not *enough* to offset the myriad of stresses the minoritized students face (1999). Further, their study acknowledges its focus is on the "unique circumstances of resource-poor communities" (p. 276), and cannot be generalized.

In the end, the research is clear that these components of academic mindsets (Demerath, 2017) are critical to academic success for all learners, and particularly for minoritized students. It behooves schools to "focus on teaching all people how to live in an inclusive community where each person is treated with respect and dignity and enlisted to participate fully in the life of the community" (Beck & Malley 1998, p. 133).

This Study's Contribution to the Literature

There is no shortage of research examining, and *admiring*, the problem of underrepresentation of minoritized students in advanced coursework. While the body of research is deep, there remains a gap in two areas that my study intends to inform. First, little attention has been paid to the beliefs, experiences, and perceptions of the minoritized students in their course selections that ultimately lay the foundation for the existing gap; second, the vast majority of the research focuses on schools where

minoritized populations are large--in some cases, the majority, and where those populations are long-established.

My study seeks to better understand and give voice to the process of course selection throughout high school by minoritized populations in high schools with new diversity to illuminate potential reasons and solutions for the continuing disproportionality between school demographics and the number of minoritized students taking and *succeeding* in advanced courses.

My study will assume the interpretivist or constructivist paradigm. I believe, as Glesne posits, that “reality is socially constructed, complex, and ever changing [and that] social realities are constructed by the participants in those social settings” (1999, p.5). Moving from a quantitative perspective, as much of the current research illuminates, to a qualitative analysis of this issue—seeing it through the eyes of specific students living the experience everyday, I see an opportunity to better identify and mitigate the obstacles that keep minoritized and low-income learners from enrolling in and having success in advanced coursework.

Chapter 3

Methodology

Interpretive Research Paradigm

I agree with Leer that a positivist paradigm seems inappropriate when researchers “seek to investigate the complexity of human experience and behavior and to discover how individuals understand their own beliefs and practices” (2010, p. 41). While much of the current research on the disproportionality of students enrolled in advanced coursework indeed takes a positivist perspective, in my study I assume the interpretivist or constructivist paradigm. I believe, as Glesne posits, that “reality is socially constructed, complex, and ever changing [and that] social realities are constructed by the participants in those social settings” (1999, p.5). Moving from a quantitative perspective, to a qualitative analysis of this issue—seeing it through the eyes of specific students living the experience every day, I saw an opportunity to identify and, by doing so, mitigate the obstacles that keep minoritized and low-income learners from enrolling in and having success in advanced coursework.

In order to build this understanding, I also needed to develop an “emic” perspective, thus, spent time within the students’ and teachers’ cultures. I visited their school environments, interacted with them in those “home” school environments, earned their trust, listened to their words, observed their behaviors, and discovered their perceptions of the world around them. I used a case study design, specifically a two-site case study, which, according to Merriam, is optimal for examining educational issues or problems “to bring about understanding that in turn can affect and perhaps even improve practice” (1988, p. 32). The two cases chosen for this study were selected first because

both are peri-urban, different from most all of the research cases that take place in larger urban areas. Secondly, both are typical of an American community experiencing new diversity, and because they are similar to the community and school where I work which gave rise to this study. Data collection took place at two mid-western high schools, and included observational, survey, and interview data from and about selected minoritized students and a sample of their teachers.

Assumptions and Research Subjectivity

It was not possible for me as a researcher to extricate myself from my own cultural context and conduct this study with total objectivity. I unavoidably brought assumptions to the process, including to my methodology and methods. Most importantly, I have lived the experience of a white middle class male educator and school leader. As a result, I have not lived nor believe myself able to comprehensively understand the life experience of people of color. As Leer asserts, “Race affects one’s interactions in the world in ways that are invisible to [a] privileged white position” (2010, p. 47). Further, I believe that white educators are incapable of comprehensively understanding and responding to the challenges minoritized students encounter trying to access and be successful in rigorous secondary level coursework.

My study also assumed, however, that educators can become more aware of the role white privilege has in shaping their perceptions of learning and that awareness can cause teachers individually and educators collectively to engage in more reflective, critical pedagogy (Barnett, 200; McIntyre, 1997; Sleeter, 1995, 1996b). As a result, educators can take steps as individuals and as part of a system to mitigate barriers in ways

that allow minoritized students access to the well-documented benefits of rigorous academic coursework.

Finally, I assumed that participation in advanced level coursework is valuable to all students, but is of particular urgency for minoritized students as a key component in reducing the achievement and opportunity gaps present in our schools and society.

Research Methods

Setting

The Towns

I conducted my research in two small midwestern towns that, for the purpose of this study, I will refer to as Mason Springs and Benson Falls.

Mason Springs has a population of just over 25,600 and is located approximately 50 miles from the nearest major metropolitan area. The town is predominantly white, but has seen a significant increase, significant by this community's historical standards, in the numbers of Somali and Latino families living there over the last two decades. According to 2010 census data, 91 percent of the population identified as White/non-Hispanic, down from 94% in 2000. In that same time period, the black population grew from 1.6% to 3.8%, and the LatinX population from 4.3% to 7.3%.

The community responded to its changing demographics by forming an active Cultural Diversity Network and a Human Rights Commission that promote the acceptance of diversity and the elimination of prejudice and discrimination, and also educate the community on issues of discrimination and diversity as well as provide for the needs of recent immigrants. In response to the growth in the non-English speaking immigration into the community, Mason Springs school district began providing English

as a Second Language (ESL) classes for adults and students.

Mason Springs boasts several major industries that provide an abundance of jobs, which may explain the significant population growth in the town over the past 20 years (15% overall over the past 20+ years). Residents speak highly of their town, emphasizing its safety, friendliness, schools, and cultural opportunities. The residents of Mason Springs support their schools and seem concerned about maintaining the quality educational facilities and programs. The last 25 years have seen multiple successful bond referenda and excess levies, including the most recent in November 2019, when voters approved a bond referendum to build a new high school building on the southeast corner of town. Many businesses pledged financial support as part of a community effort to build the new high school, including one that donated \$20 million dollars towards the cost of the new high school and to reduce the tax impact to the community. Other local companies pledged resources to help support the project, scheduled to open in the fall of 2023.

Benson Falls is larger than Mason Springs, with almost 106,000 people, located approximately 60 miles from the closest metropolitan area. Benson Falls is predominantly white, but less so than Mason Springs, as the growth in diversity had roughly a 20-year head start over Mason Springs. 2010 census data reports the white/non-Hispanic population in the Falls at 82%, 6.3% black, and 5.2% LatinX. Both Black and LatinX populations saw over a 100% increase in their population numbers during the preceding ten-year period. (The 2000 census lists a population of 3.5% Blacks and 2.9% for LatinX.) There are now over 80 different home languages in Benson Falls.

Like Mason Springs, the community and school district of Benson Falls have

responded to the changing demographics by adding programs and personnel to support immigrants and minoritized populations. For example, the school district employs a full time Family & Community Engagement coordinator whose job is to connect new families to services and programs in the community and within the district. The district holds monthly family engagement meetings to gather information and feedback from its minoritized and immigrant families, and to provide an educational support system for the students in those families. The school district offers a full array of ESL and college preparatory programs for its immigrant and non-English speaking population. Two civic entities, the Benson Falls Chamber of Commerce and the Benson Falls Diversity Council have helped to develop support for both the increasing diversity in town and the white population which was not fully prepared to understand or adapt to the growth in diversity. This support was initially slow in coming.

The local economy is driven by one major business in town, which employs the vast majority of Benson Falls skilled labor force. A second major business and the school district itself are the second and third leading employer in the Benson Falls, and the three provide a staggering 75 percent of the jobs in town. Town residents are proud of Benson Falls and happy to be living there. In contrast to Mason Springs, however, community residents are split on their support of the local school district. The community has a historically strong parochial school background, and in some cases, has represented as anti-public school, both in rhetoric and in fiscal support. That said, similar to Mason Springs, Benson Falls supported a bond referendum in the Fall of 2019 to build new schools, upgrade existing facilities, and increase space opportunities at existing buildings.

The Schools

The two high schools where I centered my study, Mason Springs High School and Horace James High School, are similar in that they are non-urban, and have *new diversity*, diversity that is less than one third of the overall student population and is part of a relatively new ethnic and cultural diasporas which have largely developed due to processes of globalization.

Mason Springs High School (MSHS) is the only high school in the town, and it serves almost 1500 students in grades nine through twelve. It utilizes a block schedule: four daily class periods of ninety minutes each with a twenty-minute homeroom once per week. Students perform consistently well at the state and national level on the ACT when one factors in that 96% of graduates take the exam (the school provides it to all of its juniors each year). The 2019 average was 20, but was consistently in the 22 range when only 2/3 of its population chose to take the exam. (Mason Springs offers the ACT free to all students now.) The graduation rate is approximately 92% with 79% of high school graduates typically going on to post-secondary education. The MSHS minoritized student population is 23% including 11.8% LatinX, and 7.3% Black.

In general, parents are involved in their children's education and are concerned about academic achievement and the quality of the MSHS education program. As an example of this attention to achievement, the parents of roughly a third of all 9th and 10th graders choose the advanced English track for their students because it is considered the college-bound track. That those students are ready or even willing to do advanced work appears largely irrelevant. While there have been efforts over the last few years to move more minoritized students into advanced courses (the high school has been an AVID

school for six years), they are still overwhelmingly white. Even though minoritized students can be found in most classes at MSHS (minoritized students comprise just under 23% of the high school student body, or about 345 students), only 36% (or 88 actual) of those take an advanced course, compared to nearly 70% of their white classmates. Those percentages were significantly more disparate prior to the AVID program's influence. The faculty at MSHS is overwhelmingly, in fact almost entirely, white. Of the 96 teachers at the high school, only three are from minoritized groups.

The school district administration is proud of its teachers and school system. Principals are willing to hire veteran teachers with advanced degrees (67% of the district's teachers hold one currently), even if it means a higher cost to the district. New hires are also awarded full credit for experience and additional education on the salary schedule. 83% of the licensed staff has over 3 years of experience. Teacher pay is competitive considering it is a rural district, and if teachers do summer curriculum work, serve on district committees, and take on leadership roles in the district, they are paid for that work. Although MSHS has dealt with similar budget limitations to almost every other public school, teachers are still given money each year to pursue professional learning, and to purchase curriculum materials and other classroom resources. In general, staff morale is considered positive.

Horace James High School (HJHS) is one of three high schools in Benson Falls and serves 1700 students in grades nine through twelve. It uses a 7-period daily schedule, with 50-minute class periods. Like Mason Springs, HJHS students outperform state and national averages in almost all areas of academics, including the ACT. HJHS qualifies a noticeably large number of students for the College Board's National Merit Competition

each year, and ranks nationally in a number of data points as a high-achieving high school. The graduation rate is 92% with 92 percent of graduates attending post-secondary, and the school's student population is 33% minoritized, including 10.8% LatinX, and 12.3% Black. This student population at HJHS speak 80 different languages of origin.

The parent community is certainly involved in the district and concerned about the quality of education for their students. Some students and staff assert that high achievement has moved from a healthy goal to one that puts an unhealthy amount of pressure on HJHS students, a condition many in the school system believe was created by the highly educated and high-achieving parents in the community. 51% of all students in the high school take at least one AP class, but, like Mason Springs, the school's 33% diversity is nowhere near adequately reflected in the advanced classes. A quick walkthrough of advanced classes reveals a smattering of minoritized students—certainly not a visual that approaches 1 in 3 of the students.

The school district administration is, like their counterparts in Mason Springs, proud and supportive of its teachers and school system. 63% of the district's teachers hold master's degrees, and over 90% of district teachers have been there for over three years. While they are experienced and well educated by formal standards, the high school is remarkably homogenous: while one out of every 3 students is minoritized at Horace James High School, the school employs only 4 teachers of color out of the 125 who work there, or just over 3%. The student body is ten times more diverse than the teaching staff.

Participants

Staff

My adult research participants included three members of the MSHS teaching staff and two members of the HJHS teaching staff. To recruit the 4-6 teachers I was seeking to participate in my study, I sent introductory letters to building principals asking them first for permission to conduct my study, and secondly for them to identify teachers in their buildings whom I could ask to participate. Once I had that list of teachers, I sent letters through school email to the identified teachers. The letters explained my research topic and how I was seeking volunteers to be co-inquirers with me to learn more about the experience of minoritized students in high school course selection. I wanted teachers to show and tell me their perspectives on the state of equity in their courses and schools related to enrollment in advanced coursework—both the successes and challenges, and to share their beliefs and assumptions about what is creating the opportunity gap and why the gap persists.

To participate, volunteers had to be currently teaching, or have had experience teaching both regular and advanced courses in their area of discipline and be willing to participate in a 40-minute interview during their preparation time, as well as allow me to observe them teaching in their classrooms. They also had to be willing to commit to a follow-up interview if it was deemed necessary.

The five teachers who did participate represent the demographics of their respective building's teaching staff's well. All five are veteran white teachers who have been in the school for over three years and have advanced degrees. Ed and Val are colleagues at Horace James High School. Dana, Wayne, and Scott have been colleagues

at Mason Springs High School for over two decades. Ed is 41 years of age, and in his 18th year of teaching, the last 16 at HJHS. His first two years in the profession he spent at the middle school level in three different schools. He holds a master's in Instructional Technology. Val is 55 years old, and has been teaching at the middle school and high school level in three different schools for 28 years, the last 21 at HJHS. Val has no advanced degree, but will soon finish a master's in statistics. Dana is 54 years old, has 29 years of teaching experience at two different high schools, and holds a master's degree in education. Wayne is 59 years old, with 31 years of teaching experience, also at 2 high schools, and holds a master's degree in teaching. Scott is 50 years old, and has been at Mason Springs High School for 22 of his 28 years as a classroom teacher. His previous six years were spent in a nearby high school, so his career has been exclusively at the high school level. Scott holds a master's degree in educational leadership.

All five of the teachers who participated in the study recognized that there was a disparity between their school's student demographic and the advanced course enrollment demographic. All saw the disparity as *curious*—they were not really able to put a finger on why it existed or persisted, and *disconcerting*—they shared an interest in seeing that disparity shrink in their schools. Each was confident that shrinking the gap was possible, but they simply didn't know what steps were necessary for that to occur.

Students

My student research participants included 46 minoritized students across the two schools (See Table 1). All of those students participated in a written survey, and 10 students (5 at each school) were also asked to participate in individual follow up interviews I conducted at the two schools. When I sent my introductory letter to

principals, I also asked that they assemble a random group of 20-25 minoritized students to whom I could explain my study and invite them to complete the survey. The students each principal assembled had varied levels of participation in advanced coursework, from zero courses to more than three courses. 25 students completed the survey from Mason Springs HS, while 21 completed the survey from Horace James HS. The five students from each school whom I interviewed were selected at random by each building principal, and answered the same eleven questions.

Table 1

Student Participants

Total Participants	45
Male	16
Female	29
Black or African American	22
African	7
Hispanic or Latino	9
Asian or Asian American	6
Other	1

Data Collection Strategies

After receiving human subjects approval (IRB protocol #4554) and establishing my group of research participants, I began the process of generating data. Because “the use of multiple data-collection methods contributes to the trustworthiness of the data” (Glesne, 1999, p.31), I used multiple methods in my study.

Individual interviews

I conducted five 45-minute interviews with each of the adult participants and 10 25-minute interviews with each of the student participants. The interviews were recorded digitally and were later transcribed for detailed analysis. The complete student and staff

interview guides are included in this study as appendices B and C.

In the staff interviews, I asked participants about general issues relevant to the enrollment of students in advanced coursework at their high school. I began each interview by making sure each teacher was aware of the historical and current demographic discrepancy between school enrollment and advanced coursework enrollment. I asked participants to talk about how the enrollment process works in their schools, and how students end up in advanced courses and how they achieve success. I also asked participants to share their personal perspectives on advanced coursework enrollment in their classes and in their schools in general. Questions included the following:

- How are first-time advanced coursework students supported in your classes?
- In your experience, what specific non-cognitive factors, skills, or dispositions have you noticed in successful students in advanced courses?
- There is a gap nationally between the percentage of minoritized & low-income students who access advanced coursework. To what do you attribute that gap?
- How might you and other teachers in your school support minoritized & low-income students to increase their participation in advanced coursework?

In the student interviews, I began by explaining that I was gathering data about the process students go through as they enroll for classes in school. I did not indicate the nature of my research questions related to minoritized student enrollment in advanced courses. I asked participants about general issues related to being a student at their school, and also asked each of them to share their personal experiences of and

perspectives on being a student at their school and the process of enrolling in courses.

Questions included the following:

- In general, how do you choose the courses that you plan to take each year in school?
- How did you decide (to take/not to take) advanced courses?
- If a school staff member encouraged you to take a particular advanced course, what impact would that have?
- What types of support do you feel you need to ensure you are successful in your school work?

Survey

I conducted a written survey at both schools, each in a single setting with groups of minoritized students assembled by the principal of each building. 25 students from Mason Springs HS and 21 students from Horace James HS completed the survey. The student survey items that I used were part of a longer survey developed by researchers at the University of Minnesota's Center for Applied Research and Educational Improvement (CAREI). The full student survey is included as Appendix A of this study.

Survey items asked students to identify their gender and race, and the number of advanced courses they had taken in their high school experiences, as well as a series of statements about which they were asked to gauge their level of agreement or disagreement. The twelve statements included the following:

- I know I can get support at school if I struggle in AP courses.
- At registration time, school staff assist me in choosing classes that will help me reach my goals for education after high school.

- An adult at my school has encouraged me to take AP classes.
- My teachers have high expectations for me.

Non-participant classroom observation

For each staff participant, I observed two class periods for each teacher when he or she was teaching an advanced course. Some but not all of the students who participated in the survey and interviews were among those in the classes I observed. I tried to make my presence in the classroom as unobtrusive as possible, so that I did not affect the dynamics of the classroom community. During my observations, I typed field notes on a laptop computer, describing classroom activities and communications. In addition, I made handwritten notes and illustrations as well, noting the physical layout and decor of the classroom environments, as well as student enrollment demographic information. While observing, I focused on how the physical classroom space and the teachers' speech and non-verbal cues did or did not promote an environment where students of all types could feel supported and welcomed.

Data Analysis Procedures

I began with my four research questions to guide the data collection component of my study. Over the course of my study, I was continuously reflecting on the data I was gathering, thinking about possible categories for analysis. My analysis and interpretation of data was an inductive process of constant comparison across and within cases (Huberman & Miles, 1994), the intent of which was the creation and refinement of thematic groups and recognition of negative cases (Erickson, 1986). When data collection was complete, I created a preliminary coding system and assigned the data to relevant categories using the software package NVivo. Some umbrella categories of analysis were

born out of my research questions (e.g. teacher beliefs and assumptions), but other categories as well as my subcategories grew out of the data.

The data collection methods I used naturally created a set of individual case studies, which I used to create an initial analytical narrative organized by data set-- student survey, student interviews, and staff interviews. I then revisited the coding process, whereby I essentially coded my own findings and analysis narrative as a means of reorganizing the findings and analysis into the six factors influencing student course selection. Again, though I started with my four research questions as my guide, these six themes or factors emerged inductively, and these were used to structure the findings in chapter four. Considering the findings organized by theme instead of as answers to my original research questions allowed me to reveal a more holistic picture of the state of equity in advanced course enrollment and determine possible ways to lessen the opportunity gap in non-urban new diversity high schools. A subsequent result of this organizational shift was that I determined research question four not a research question after all. The answers to the question remained nevertheless important; thus became the set of collected implications for teachers, school leaders, and school systems found in chapter five.

Trustworthiness

The assurance of trustworthiness for this study was built from the framework for trustworthiness in qualitative studies created by Lincoln and Guba (1985), including:

- Triangulation – Multiple data gathering tools: observations, interviews, and surveys were completed at two different sites. Gathering data from several different sources increases the internal validity of the study.

- Member Checks – Particularly with student interviews, I allowed my participants to read the data I had gathered from and about them, to ensure an accurate description of that data.
- Transferability – Given this study was embedded in two separate schools with similar new diversity, transferability to other schools with new diversity will be maximized.
- Dependability – The process of inquiry was documented, interviews recorded, and field notes taken to maximize dependability of data.

While statistical generalizability is not the intent of this study, or interpretive research in general, discovering the perspectives and perceptions of minoritized students in the course registration process, and the perceptions, attitudes, and beliefs of their teachers in two representative high schools can inform both the theory and practice of other teachers in similar settings.

Chapter Four

Findings

The value of this study to the administrators of Mason Springs HS and Horace James HS lies in its ability to help them and their staffs know and understand the perspectives and experiences of their minoritized students—thereby informing their practices and behaviors in ways that will better serve their unique needs. For other administrative practitioners of schools *similar* to these two schools the value of this study is two-fold: first, the student survey data, teacher interview data, and student interview data from these two schools helps clarify and quantify the perceptions and experiences about course registration and course-taking of a representative sample of minoritized students at each institution and a representative sample of teaching staff who work in the two schools. They allow for the opportunity to explore those schools in a way that informs practices that could help reduce the opportunity gap at those other schools; second, the analysis of these two schools gives further insight into what beliefs and practices may be most effective in reducing and in some cases, exacerbating the opportunity gap.

The Three Data Sets

Student Survey

A group of minoritized students was assembled at random by the principal at both Mason Springs HS and Horace James HS in advance of one of my visits to each school. Each group assembled in the auditorium at each school building, and I provided a brief oral summary of my study before I asked students to complete the survey. Twenty-one

students completed the survey at Horace James High School and twenty-five students completed it at Mason Springs High School.

Student survey questions asked that respondents indicate the degree to which they agreed or disagreed with twelve statements related to their perceptions of, and experience with course registration and course-taking in high school. Students were asked to select one of five options on a Likert scale: Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, or Strongly Disagree.

Staff Interviews and Student Interviews

As a complement to the data gathered in the student surveys, additional qualitative data was gathered through student and staff interviews at Mason Springs and Horace James High Schools. Again, both are schools serving non-urban communities where the growth in diversity is relatively recent and still represents a small proportion of the overall population. The data gathered from those interviews illustrates and illuminates how student and staff perceptions and behaviors impact course registration and course-taking at each institution, and potentially at other institutions in communities similar to Mason Springs High School and Horace James High School.

Five teachers participated in individual interviews from the two schools, three from Mason Springs HS--Dana, Scott, and Wayne, and two from Horace James HS--Val and Ed. Each teacher was asked the same nine questions with follow-up questions when they served the purpose of clarifying information that was shared by the interviewee.

Ten students participated in individual student interviews from the two schools, five from Mason Springs HS--Solomon, Latisha, Miriam, Janet, and Nathan, and five from Horace James HS--Desiree, Leslie, Michael, Saul, and Gabrielle, all minoritized

students. The students were randomly selected by the building principal at each school from the pool of students who participated in the survey, and all ten willingly agreed to participate in the interviews. Each student was asked the same twelve questions with follow-up questions when they served the purpose of clarifying information that was shared by the interviewees.

Taken individually, the data sets mined for this study each present a representative sample of their populations that allow educational practitioners a glimpse into the thoughts and perceptions of the two major stakeholders in an educational system: student and teacher. When the student survey data and student and staff interview data from both institutions are examined *collectively*, they begin to reveal themes that shed a much more significant light on how perceptions, actions, and beliefs of staff and minoritized students can and do impact the registration process and course-taking of those minoritized students, and how far-reaching that impact can be. To that end, the following narrative summaries of the findings bring together data from the three data sets to highlight themes and issues related to course registration and course-taking at both Horace James High School and Mason Springs High School. It should be noted, here, the degree to which minoritized students as a whole are accessing AP courses at these two schools: minoritized students account for approximately 30% of AP enrollees at HJHS, and 11% at Mason Springs.

Being Comfortable At School

Frequently, we use the expression “make yourself at home” to make visitors feel at ease in otherwise unfamiliar surroundings. The intent is to give the visitor the opportunity to feel comfortable, to feel like they belong there, and to feel like an

unfamiliar place is no different than the places they are used to being. While school staff typically don't think to use this kind of language with students who enroll in their classes, the data from this study, at least, suggests that comfort matters *a lot*.

It is first important to note two things related to the idea of student comfort: first, comfort means many different things to the students who participated in this study, and the idea of comfort can be a bit obtuse as a defining characteristic of an academic course. That fact, however, does not invalidate nor decrease its relevance and importance to the course selection process, likely for all students, but certainly traditionally minoritized students. Secondly, perhaps more importantly, for many students, comfort is the perceived gateway through which they will learn, and more readily access specific academic supports to ensure and maximize their success.

To start, 95% of student survey respondents at Horace James High School agreed that they were generally comfortable taking AP classes, with over half of them strongly in agreement. 63% of Mason Springs respondents indicated they were comfortable taking an AP course, with 21% strongly agreeing. Additional data from the survey data set suggested it was certainly not comfort alone that clinched the decision to take an AP course, given that while 95 percent of respondents at HJ and 63 percent at MS were comfortable taking AP courses, 90 percent at HS and only 21 percent at MS had actually enrolled in one or more.

Survey respondents from the two schools were similar in their responses to the question that gauged their comfort in taking hard classes, even if it meant getting a lower grade. As the responses indicate below, the concern about comfort was clearly about personal comfort specifically, as it did not appear to be related to concerns regarding their

academic performance in advanced classes. The percentage who agreed on some level was not only quite close between the two schools--83% of respondents from Mason Springs agreed while 85% of respondents from Horace James HS agreed, but also the breakdown across the three levels of agreement on the Likert scale was strikingly similar (roughly one third of the respondents at both schools fell into each of the three levels of agreement—strongly agree, agree, and somewhat agree). This presented as both inspiring and confounding: inspiring in that these students clearly placed a higher priority on learning and rigor than they did grades; and, confounding in the fact that, given this prioritization and willingness, more of them had not pursued at least one AP course or at least been encouraged to do so.

Perhaps a portion of that is explainable. If, as the survey data suggests, 60% of students knew they can take an AP course regardless of their previous academic performance or prerequisites, that means that 40 percent were *not* being told to “make yourself comfortable,” and as a result, many of those are not *getting* comfortable.

Among the ten students who participated in the student interviews, agreement across their responses was most profound in their description of the primary factor that made rigorous classes comfortable and enjoyable. Not only did every student mention the teacher, most all of them *led* their answer with, for example, “definitely the teacher” as the most important factor in their level of comfort in advanced courses. *Specifically, how* that teacher was the most important factor of comfort varied significantly across the respondents, however. Some of those ways included the following:

- Teachers who enjoyed themselves and enjoyed teaching.
- Teachers actually talking to students and listening to what students had to say.

- Teachers who made the content relevant and real for their students.
- Teachers who worked hard to make connections with and “reach out” to each student.
- Teachers who considered a variety of teaching and learning styles.
- Teachers who took initiative and reached out, as opposed to simply being available.
- Teachers who were willing to work with students even if it required them to go out of their way.

One HJHS student pointed out that a connection she had with a teacher of a particularly rigorous class made it a lot easier to remember or learn the material that she was being taught. Another simply said, “If a teacher is willing to work with you, there is nothing you can’t learn.” Still another student acknowledged that students will always have questions, but if the teacher hasn’t made the environment comfortable, those questions will often go unasked. The discomfort, then, compounds, to a point where, as a third student points out, her willingness to take subsequent honors courses is tested.

One might predict that when asked to identify what makes an advanced course *uncomfortable* or not enjoyable, the ten students who were interviewed would in turn provide the inverse answer. This was indeed predominantly the case. Across the responses, students spoke of lecture-heavy teaching, described teachers they simply could not understand, or who assigned unnecessarily large amounts of work. They remembered teachers with whom they didn’t connect, or didn’t get to know very well, or were simply not very caring--didn’t go the extra mile to get to know them or support them in their

work. One Mason Springs student spoke to being on the receiving end of what Michael Gerson called, “The Soft Bigotry of Low Expectations”(Johnston, 1999, p. 18):

If a teacher went lenient on me, that would make me feel uncomfortable, making me think ‘I am different: is it because of the color of my skin, just taking it more simple on me, or is it just because of my education level?’ I’d want to be treated equally.

It is interesting to note here that given the challenge and rigor of an advanced course, when asked what makes an advanced class comfortable, only one of the ten students interviewed referenced anything related to difficulty of content, not understanding the material, or feeling overmatched by the coursework. Their other interview answers certainly indicated that they were aware of the difference in rigor of advanced courses, and the decision-making that went into course registration certainly takes this into account, but when students were asked to truly focus on comfort and enjoyment, it was the people, not the curriculum, that mattered in advanced courses. And as noted earlier in this chapter, this was confirmed by the student survey responses to questions related to their willingness to take advanced courses.

One in four students surveyed indicated that AP classes, or the idea of taking AP classes, made them uncomfortable, and only 1 in 2 students confidently stated that they are comfortable taking AP courses. Some of that lack of comfort with AP courses may have come from a concern with whether or not students can get help if they run into struggles during the class. Nearly a third of surveyed students expressed concern about being able to get support if they struggled in advanced courses.

With a Little Help From My Friends

While the teacher was by far the main catalyst for a student's comfort in a rigorous course, a predominant number of the students interviewed and surveyed also placed a high value on who the other students in the classroom were. Over half of the interviewed students indicated they were more comfortable if they knew other people in the class, and even better if their friends were there to take the course with them, so they had someone there they were comfortable asking for help.

Noteworthy here is that the students who partook in the interviews were only asked what made them comfortable in an advanced course. The survey respondents on the other hand were specifically asked if having people they know in the advanced course makes them more comfortable in that environment. Also noteworthy here is that all of the students interviewed who indicated comfort and enjoyment was increased by having friends, other minoritized students, or at least people they knew, quickly acknowledged the inverse of this was true as well. Students spoke to "not really knowing anybody" or "keeping to yourself" as being catalysts for discomfort.

Among the survey respondents from these two schools, just over 75% at Horace James and just under 75% at Mason Springs agreed that they would be more willing to take an AP class if they had friends taking the class with them. The 75% is significant given that almost half of the total number of respondents had actually not taken any AP classes, and at Mason Springs, only 29% had taken an AP class or more. The research and the dialogue are rich about the importance of and impact of minoritized students not feeling like they are the token minoritized student in an AP class, or the importance of them having someone that looks like them in the class (Kerr, 2014). While this

willingness is likely the case across the spectrum of all students, white and minoritized, it is of particular importance to those historically underrepresented populations.

Dana, a language arts teacher at Mason Springs who participated in the staff interviews, saw this exact thing, this “social aspect” as reason for the underrepresentation. He believed that “the advanced classes may have a stigma of being whiter [at Mason Springs High School]” than other places. While he had not heard that indictment first-hand, he said he “can see that might be a factor in signing up for courses if your peers are not.” As stated in chapter two and earlier in this chapter, his assumption that the whiteness of advanced courses at MSHS makes minoritized students reluctant to enroll in those courses and, as a result, perpetuates their whiteness, certainly has backing in the research and, first-hand, in the words of this student from Mason Springs, who highlighted not only the importance of having people they knew in class, particularly other minoritized students, but also illustrated how the discomfort as a result of not having people in class with whom they were familiar can distract from the content itself: “In a lot of AP classes, I didn’t have...people I knew. Just that, like, I didn’t know anybody. I would just sit there and be like, ‘I don’t know these people.’”

The same student illustrated a moment when being the only person of color exacerbated the discomfort: the teacher would do an oral exercise where, when called on, students had to define a particular vocabulary word. If any student missed their word during the exercise, the teacher would have the whole class take a test as a “consequence.” While this likely made all the students uncomfortable to some degree, it was intensely uncomfortable for a student of color, the lone student of color in the class, to feel responsible for the masses being “punished” for her incorrect answer. Again, like

the inverse illustrated earlier, discomfort and lack of enjoyment were, based on the answers from both the student interviews and survey, almost completely unrelated to the workload, the level of difficulty, or anything related to the curriculum.

Ed, a math and computer science teacher at Horace James High School, concluded that perhaps students felt uncomfortable as well because there were things about enrolling in an AP course that were simply scary and unfamiliar. Specific to his AP computer science course, he saw a very predictable fear in that everyone used computers but very few people understood how they worked. More generally, however, he believed that students unfamiliar to the advanced rigor simply didn't know what they were getting into, and we as humans often times are scared of what we don't know. Ultimately, he believes the solution lies in exposure:

A minority student may understand what an [advanced] class might kind of do for them or what it would entail, but what they might have to learn, and how much harder maybe they would have to work...might be scary if they've never took [sic] one. Are they just scared off because it sounds impossible? I think it's sort of exposure and then on top of that, why would you bother?

Ed further illustrated this idea of lack of exposure and understanding leading to lack of participation with a story of a minoritized student to whom he was explaining the stock market. The student's mother didn't know how the market worked, so concluded it to be a scam, so didn't invest any money in it or any other investment options:

It was all just a big game of money and wasn't fair, so she didn't really have any good exposure to it, so therefore, wasn't going to use it, and therefore she

couldn't make any money off of it. Whereas a lot of other people have had that exposure and are making money off of it.

While the students and teachers who participated in this study were far from defining clearly and completely what it meant to be comfortable with and in advanced coursework, it was clear that, broad as the explanation of comfort may seem, it was a major consideration for minoritized students in how they viewed school and the classes in which they enrolled.

Access

Another major influence on students' willingness and ability to enroll and participate in AP classes was both real and perceived *access* to those courses, and their ability to access support once they were in those courses and ran into struggles and challenges.

The opportunity gap between minoritized students and white students is not news to anyone affiliated with any public school system, nor is it fair to say that schools have made no effort to narrow it. That said, the problem of how to increase access to advance coursework persists, and is at least in part due to a lack of understanding about what access really is, and more importantly, the fact that educators might be misunderstanding what it looks like and feels like to those for whom they are trying to increase access. The students and teachers who participated in this study provided some valuable insight into both the reasons for the gap, and ways to think about improving our practices intended to reduce it.

Sometimes the numbers don't always lay bare the issues that lay behind them. For example, specific to student perceptions about accessing AP or advanced level

coursework, 83 percent of student survey respondents felt that any student could access AP courses if they wanted to. While encouraging on first blush to see that percentage knowing or believing they had access, it needs to be noted that the 17% who disagreed attended schools which had four of their twelve AP courses (HJHS) and six of their fourteen AP courses (MSHS) with no prerequisite of any kind. Perhaps as a result, only 26 of the 45 respondents, or 58 percent, had taken any advanced courses. The disparity between the number who know they can take AP classes and the number of them who actually have, would seem to suggest a disconnect between what is available to them and what they are *encouraged* to pursue. In addition, a wealth of research points to the long-term benefits of advanced coursework for all students, regardless of whether or not they are successful in that coursework (Klepfer & Hull, 2012); thus, it would seem important for all learners to at least be aware of advanced courses that have no prerequisite barrier—and it would seem incumbent on the adults who work with these students to be the conduit of that awareness and a level of encouragement that grows the number of minoritized students who enroll closer to each school's demographic breakdown.

A number of the responses from students participating in the survey revealed a significant difference between the experiences and perceptions of the students at Horace James High School and those at Mason Springs, and in these disparate experiences and perceptions lies opportunity for deeper learning about similar students and more importantly, the adults who work with them in schools.

Splitting the survey responses by school certainly provided deeper analysis of the theme of access: 95% of students at Horace James HS had this perception about AP course access, while 71% of students at Mason Springs had it. In other words, almost $\frac{1}{3}$

of the respondents from MSHS entered each registration cycle with a licensed teacher who was assigned to them and tasked with helping them make informed decisions about their course registration, and came away believing that AP courses were not available to them, or worse, they were *hearing* that those classes were not for them or were being discouraged from taking them.

The difference between the percentage of students who *strongly agree* that they have access if they choose to pursue advanced courses was even more disparate. Two thirds of students surveyed at HJHS strongly agreed that all students have access, while less than $\frac{1}{3}$ strongly agreed at Mason Springs. Similarly, 81% of students surveyed at HJHS agreed that an adult at their school had, at some point, encouraged them to take an AP course. By contrast, only 42% of respondents at MSHS indicated that they had been encouraged by an adult to take an AP course. Perhaps more troubling: half of the students surveyed either disagreed or strongly disagreed, suggesting that perhaps it was more than just not being encouraged; rather, those 12 students were told *not* to pursue advanced coursework. This difference becomes particularly noteworthy when one considers that MSHS is an Avid school, and a main tenet of the Avid program is to more effectively expose minoritized students to more rigorous coursework.

In general, all five teachers who were interviewed for this study described some level of open access to advanced level courses at their school. All three from Mason Springs used the term “self-selected” to describe the pathway into advanced courses, and each had some qualifiers related to the idea of self-selection. Dana described conversations he has had with students in which he “will tell them where they probably fit best,” and also indicated that students may be directed or encouraged into certain

levels when they are in middle school, so already have a sense of where they “fit.”

Students also had access to concurrent college-level advanced coursework (College in the Schools, or CIS) in their junior and senior years, and that program was more restrictive, and depended on their class rank. The CIS program requires students to be in the top third of their class as juniors and the top half of their class as seniors. Wayne described situations where he would periodically, essentially, dare students in order to convince them to push themselves into an advanced course. He believed adamantly that students should have the opportunity to stretch themselves, and so he encouraged that way more often than not. He also indicated that he had never said nor had he heard a colleague say “it’s probably going to be too tough for you.” Scott added that students “get guidance, counseling, and suggestions from teachers, but it is really self-selection when they get to registration night.”

At Horace James HS, Ed believed the self-selection was teamed with significant pressure on students, internal as well as external, to take advanced level courses: “overall, there’s just a general belief that you should take honors classes...the pressure...has been going on for 20 years at least.” This push, he believed, came from the students themselves, other students, and the community even more so than it did from teachers who intimately know their abilities and skill levels. Val, a math teacher, had the most significant “asterisk” to their self-selection description:

I can’t speak for other subjects, but in math it’s determined really early, like in middle school. Probably 80-90% of the students that end up in calculus--it was determined in middle school that they should be either 1 year accelerated or 2 years accelerated. The remaining 10-20% are kids who [were motivated enough

to] have taken both geometry and algebra 2 in the same year...the typical one is [an] accelerated or double accelerated student in middle school.

Val's description of the process suggested that while students could technically self-select to "catch up" to the accelerated and double accelerated students so that they had access to calculus as seniors, the *only* pathway was the requirement of doubling up on mathematics courses. Bear in mind that this double math trajectory would be required of students who in middle school were deemed not ready for the accelerated or double accelerated math track, hardly what many would describe as equitable *access*.

Ed revealed an even deeper irony in telling the story of his wife's experience in AP computer science, prior to the prerequisite requirement:

My wife went to school here and because her math teacher said, "Hey, I think you should take this [AP] computer science class," she took it and found out that she loved it. She went off to [to college] and majored in it, so it was really kind of a life changing thing for her, and so because of that, I have actually really tried hard to maintain that focus with that class. So now we have some prerequisites.

Given he knows intimately an example of a student being given a chance, and it becoming a life-changing experience, a shift to a more selective and restrictive process for students actually ending up in the AP course, and the lack of any commitment to support first-time, particularly minoritized students, seemed counterintuitive at best.

As stated earlier, access is not only about whether or not students can get into a class. In truth, some schools are indeed "open access," and certainly based on student survey responses, many students felt that system obstacles would not stand in their way if they were set on enrolling in advanced coursework. There is clearly more to it than that.

Access is also about being able to access the tools, resources and support necessary to succeed in those classes once students are enrolled. Without having confidence that support is available, students will not likely feel that these classes are truly accessible.

There is plentiful research based in urban settings on how to maximize the opportunity for student success in advanced courses, and maximizing that opportunity in particular for minoritized students and students in their first attempt at more rigorous coursework. That research readily points to the need for consistent, significant, layered support for those students throughout that course experience (Ketelsen, 2017; Kitchen, 2007; Means & Knapp, 1991; Walker, 2007), and it matters whether or not students perceive that support to be available to them. 90% of the students surveyed at Horace James HS expressed confidence that they could get the support they needed if they struggled in advanced coursework. 55% of those *strongly* agreed that that was the case. In contrast, just over half, or 54% of students at Mason Springs shared the same level of confidence in there being support available, and fewer than half of those who agreed did so strongly. Wondering whether or not that support was there, would come, or would be sufficient could clearly make the difference for a student who is weighing the “risk” of taking a rigorous course, and you will see later in this chapter that providing students the avenue to register for these classes with confidence that the support and encouragement will be there can make a world of difference.

Val, the veteran math teacher at Horace James HS, in approach to first-time advanced coursework students embodied most closely what researchers concluded is necessary for these students, and clearly what students need to see and hear in order to believe that these courses truly are available to them:

I've done a lot of research in differentiation and I make it a point, myself, to identify early in the year, within the first month, who needs individual attention, who works best in a group, who does partner activities well, and so on and so forth, and I try to give them what they need. I've structured my course such that direct instruction is part, but it's not the dominating part. And during non-direct instruction time I can spend time with my kids who really struggle with this material. I do discover this organically. Two kiddos I have been working with quite a bit; they've been struggling a fair amount, so I take the time when we're doing partner activities to make sure I'm at least getting them so they feel they can at least grab on.

In addition to being the only teacher of the five to articulate in depth an awareness of and a purposeful response to first time AP students, Val was the only teacher of the five who described extra support as being something that the first time AP students would *definitely need*, as opposed to being able to access *if the needs arose*.

As already mentioned, Scott, a Mason Springs HS math teacher, was aware that he had a lot of first time AP students, mainly because his course was frequented by students for whom his course was their only AP experience. This was, in part, because the only prerequisite for his AP Statistics course was Algebra 2, which was a requirement of all graduates of state high schools, so the course *felt* more accessible to students. In addition, Mason Springs was a school that implemented the AVID program a number of years ago, and one of the goals of that program was to expose non-traditional advanced coursework students to a higher level of rigor. Strangely, Scott had neither an awareness

of who those first-time students were nor a plan for helping to ensure they maximized their opportunity for success.

None of that, however, helped him understand why more minoritized students were not accessing his or other AP courses. His assessment was simply that it was “utterly perplexing.” Yet, throughout his interview, he spoke from a fairly consistent perspective of students needing to help themselves and less about the system or teachers figuring out a means of supporting them. That said he did acknowledge that the system had perhaps exacerbated, if not created the problem:

My thought is that it’s conditioning. You know, in the era I grew up in, I had girls my age tell me their counselors told them not to take math, that it wasn’t becoming...so there’s conditioning on the part of the adults coaching the students and on the part of the students. And they are both conditioned to set low expectations. So if you’ve traveled the standards track, which is our lowest track [at Mason Springs HS], you’ve [been conditioned] to think that your expectations are low and anybody who looks at your transcript is conditioned to think that your expectations would be low.

It is important to acknowledge that Scott believed here that there was conditioning on the part of the *students* to select certain courses because of the pattern of course-taking they had become accustomed to, but it was clear that he saw this as an effect of the conditioning that originated with the adults, not a student choice unto its own. Scott’s thinking here was consistent with VanSciver’s research in a Delaware school district where minoritized students were being led to low-rigor courses (2006), as well as Garcia & Cohen’s study (2011) that determined the social tensions that schools created for

minoritized students kept them from pursuing high rigor courses even though minoritized students were not inherently less capable. Scott's awareness of this 'conditioning,' however, was ironic in that he held to being perplexed, and stood by his assertion that his AP stats class had no barrier. Clearly, by his words, it did.

Both of the other teachers at Mason Springs, Dana and Wayne, also explained that first time students often appeared in their classes as a result of the expectations of the Avid program, but like Scott, neither indicated an intentional effort to support those first time advanced coursework students. Dana explained a system in place for all students at Mason Springs HS aptly named Academic Support "where kids can, if they're struggling with a certain grammar issue or whatever, sign up for my academic support depending on the week. We do that Wednesdays and Fridays." Students at MSHS were also told they could come in before and after school, but that doesn't work for all students. Also, students participating in the AVID program (oftentimes first generation college students), according to Dana, were taught "strategies for coming up [to the level of rigor in AP courses] with success."

Similarly, Wayne acknowledged that he did not often know when a student was a first-time advanced student, and described a general system of support that he embedded in the structure of the course and provided to every student. There appeared to be no purposeful attempt to intensify or expand the resources for those who struggled or may potentially struggle with the unfamiliarity of high rigor. In addition, other than mentioning that he provided "a lot of online resources" (again, *provided* here is difficult to define), most of what Wayne described as support is a set of what he called "skill development", including weekly spelling quizzes and comma tests.

Val expanded the number of reasons that minoritized students ended up with reduced or limited access to advanced coursework to include factors outside of school, suggesting that at Horace James HS and more broadly in the community of Benson Falls, minoritized students did not have the family advocacy, and it mattered a lot:

We have a whole bunch of students in ridiculously wealthy families and a whole bunch of students who get their food from food stamps, if at all. And I think [with] a lot of our low income families, the parents don't have the resources to advocate through the system properly, to get their students what they need. And I think, sadly, that's necessary the way our school system is now.

As an English teacher, Dana saw access as a two-pronged issue. First, for a large portion of minoritized students in Mason Springs, it had been a language issue, although it seemed to be getting better the longer this community, predominantly refugees in the early stages of the global diaspora, had been a part of the larger Mason Springs community and high school. In fact, Dana saw a consistent uptick in the number of minoritized students who had taken more and more advanced courses. Second, as mentioned in the section on comfort, he perceived that classes that were dominantly white did not feel open to minoritized students even when self-selection was the means through which students completed their course registration.

Wayne, another teacher at Mason Springs who saw and perceived similar issues with access for minoritized students, as a result, formed a leadership group with a small group of those students along with the school principal whose mission it was to make Mason Springs a more welcoming school for all students, in a way that also allowed minoritized students to see all school programs, including advanced courses, open,

accessible, achievable, and welcoming to them. The group, called the Diversity & Inclusion Group (DIG) by the Mason Springs HS administration and those who participate in it, provided him a bit more insight about a system that is far from equitable:

The first couple months of DIG, we'd meet on Mondays...I heard a lot of stories and I don't have any reason to believe that any of the people talking to me were trying to deceive me. The perceptions are very clear, and if what I've heard is true, then there are teachers that are not yet encouraging [minoritized students] to the same degree as everybody else. We've got some racial issues we need to deal with. It took civil unrest (a recent well-publicized kerfuffle at the school involving racist comments made by white students) to accelerate some programs. But it's good work...and I think it will be valuable work for all the people involved.

The system presented other ways through which students were left to feel like they didn't have the access that other students did. In one case with a student at Horace James, rigorous courses that she was willing to take, thereby bucking the impression that "those courses" were only meant for white kids, ended up being unavailable for reasons that were not made abundantly clear to students who were excluded:

As of late, I haven't had any luck getting into classes [that will challenge me or that I'm interested in]. Like, I've signed up for computer science and engineering courses...and I haven't gotten any of those. So at this point I [feel] kind of deterred from taking any more...I'm not going to sign up for more at this point.

While, again, it was not stated, or clear why this was happening, this same student speculated that the students who were already on the trajectory to those classes, or were

known to want to pursue that content area as a future career got prioritized for enrollment over students who were not as established in that “track.”

Access to advanced courses means different things to different stakeholders. It is critical that teachers examine their definition of access, and the ways their perceptions can vary from that of the minoritized students in their school. The teachers at Mason Springs, for example, defined the course selection process as ‘self-selection,’ and yet a high percentage of minoritized students at that institution believed those classes were not available to them and over half of those in this study were not being encouraged to pursue them. One Mason Springs student described her pursuit of advanced courses as frustrating in this way:

I haven’t been successful in getting those [classes]. I think sometimes they are full or usually kids who are on track for that they try to put in more of, rather than kids who haven’t been in it. So it’s something I think that if you’re projected to want to go into this [as a career], it’s usually the people who have already taken [other advanced courses] get to fill up the spots.

Moreover, in addition to students feeling like available courses really weren’t all that available, the question of how a student’s expectations had been “conditioned” to aim for regular or lower rigor courses by the school and school system, as Scott explained it, begged for teachers to be acutely aware of how the school experiences of these students were impacting their sense of access to these classes. Ultimately, how teachers perceived access really did not matter if the students, for reasons big and small, saw those courses as beyond them, not for them, or inaccessible for whatever reason. A clear understanding across the stakeholders of what true accessibility looks like and feels like to all, and then

a legitimate intentional response to it, is critical to any successful effort to increase minoritized student enrollment in advanced courses and their success once they get there.

The Student-Teacher Relationship

It's hard to get very far in the application and interview process as a teaching candidate if one does not convince the interview committee that building relationships effectively with kids is a strong component of their skill set. It stands to reason then that those skills would be important to students the teachers work with as well, and also important to the process of moving students, minoritized students in particular, toward the benefits of advanced coursework. Before they can be moved by the relationship, they have to be convinced that they are in one in the first place. To that end, the ten students interviewed for this study explained some of what they expected from effective relationship builders, and their list was really about teachers showing genuine care:

- “They ask how I am doing and genuinely care about the answer, and do it consistently.”
- “They will actually stop what they are doing and talk to me.”
- “If they pay attention to me even when they are not my teacher.”
- “Making sure I am okay: the small things.”
- “If they (the teacher) are willing to adapt to me, rather than the other way around.”
- “They help me find and discover multiple ways to be successful.”
- “They tell me I’m smart.”
- “My voice matters to them.”

Academically speaking, teachers need to make sure they are communicating with students in a way that makes them feel they are respected and capable. Some students emphasized the need for frequent and regular reminders, even when it was “the student’s responsibility.” One particular student made sure to reinforce the importance of reminders, but strongly urged teachers to “stop reminding me about what I’m doing wrong. I *know* what I’m doing wrong.” And a majority of the students spoke to the importance of teachers caring about them as people, not just students in their classes, and not just about their years in high school, but also what lies beyond.

To that end, among the surveyed students at the two schools, 91% of respondents from Horace James HS indicated they had a school staff member who had taken an interest in making sure they were prepared for college. In contrast, slightly less than two-thirds of the student respondents from Mason Springs HS concurred regarding their own school experience. Almost one in five of MSHS students surveyed strongly disagreed, and just under 40% strongly disagreed or disagreed.

Val, a math teacher at Horace James High School, used his relationships with students, particularly minoritized students, to push them into advanced courses. He seized the opportunity to talk to students that he began building relationships with in the lower level math classes and prerequisite courses for AP level courses, and “killed them with encouragement.” He was astounded at what he found at that level--the level where capable students sat just outside the AP ring:

I keep my eyes open...I’ve got all these 9th grade students, I’ve got a chunk of them that should probably be in honors or accelerated math and what I am continually astounded by is the proportion in that little chunk that is black or

brown. It's astronomically high. I think in the past three years I have one boy who I could identify as white who should have been in honors. Otherwise, they are all black or brown kids. And I think that's a testament that we're failing them long before they ever get to high school.

And based on this response from one of the students from Horace James, Val's philosophy about connecting with kids and encouraging them in a way that moved them toward advanced coursework was resonating with students:

I generally work a lot harder and put a lot more time and effort into my work because I know they care about me and I respect them. I'm a lot more motivated [to take advanced courses] even if it may be a lot harder for me to do that and payback won't be that much for working the extra mile [sic]. It's still something that for me I feel morally like I should do because...it's only right that I show I care about them or respect them and what they're doing or what they are teaching. It motivates me in terms of being productive and doing my work well.

It is important to note here that while Val saw the relationships he had with these students as an opportunity to close the gap, he clearly recognized the challenge and the fact that the gap, and the challenge of gap closure had as much to do with the system that delivered his students to him as it did his capabilities to turn it around as these students' teachers.

The Importance of Initiating

Another noteworthy theme that grew out of the responses to this question was the critical importance of and the nature of ongoing communication between the teacher and student; and, perhaps more important to point out, an emphasis on teacher-initiated

communication. While educators have rightfully come to believe that, in general, asking for help is the student's responsibility, there is an intensified level of support that students perceived from the teacher when they are *being asked*. One student explained that, "sometimes I don't attempt to reach out for help so it's so really nice when it happens." And it is arguably as important to note that these students don't only feel valued and respected when teachers ask if they need help. They also want teachers to keep this in mind regardless of whether they say yes or no when the teachers ask: keep asking.

One HJHS student pointed out that a connection she had with a teacher of a particularly rigorous class made it a lot easier to remember or learn the material that she was being taught. Another simply said, "If a teacher is willing to work with you, there is nothing you can't learn." These students also remembered teachers with whom they did NOT connect, or did not get to know very well, or who were simply not very caring-- didn't go the extra mile to get to know them or support them in their work. One student explained it as a cause and effect relationship, in that, "a lot of it comes down to how much effort the teacher is putting forth in your so that you can put the same effort back into their class." If the teacher did not put in the effort first, then the student was far less inclined to initiate the effort. Another student spoke of deciding not to continue with her Spanish language study after three years, not because of the content, but "because there was a different teacher... We didn't really have a connection at all. There was no relationship." Important to note here as well that this student indicated that her participation in the Spanish progression the first three years was as much about the positive connection she had with her teacher at the time as it was an interest in developing an understanding of the language. Across all the student interviews, such

teachers did not and would not inspire them in *any* way, let alone to pursue challenging coursework.

Not all the responses were consistent or predictable. One of the most curious answers, came from a Horace James HS student who believed the relationship was more about how a staff member acted and what they *showed*, and less about what the staff member really *felt*:

I don't think it matters if the teacher cares about you or not. It's whether they *show* it or not...I could [sic] care less if a teacher goes home and doesn't like me. If he's going to fake it in front of me [to help me] get a better grade in the class, I'm okay with that...I think it's their job as a teacher...to put their personal feelings aside and make everyone feel [cared for].

While it could easily be argued that teachers, or anyone for that matter, would have a difficult time pretending that they cared well enough to thoroughly convince students that they want to build a relationship when they don't, it is worth noting that at least this student saw the outward display as a responsibility, but the genuineness of the act less important, and perhaps irrelevant.

Teacher Attitudes

Often, as groups of students move through a school system, school staff develop certain impressions or perceptions of those groups that frequently stick all the way through until those groups graduate: a particularly athletic class; a high-achieving grade level; a group with significant behavior issues. Those perceptions often form the attitudes of the teachers and other school staff toward those groups. In some respects, those attitudes can help teachers be better prepared in general. Vary rarely, however, are those

perceptions accurate across the entire given group. Similarly, students draw conclusions about the attitudes and perceptions that teachers have, and, accurate or not, these conclusions can have a profound impact on how students approach the classes they are in, the classes they select each year, and even the total experience they have as students. For example, one Mason Springs student described it this way:

If a teacher teaches their class like school has historically been taught, then it's a lot harder unless you have some outside connections with the teachers. [Otherwise it is basically] I'm the teacher, you're the student. But when the teacher makes it evident they want to talk to you, or there is [differentiation] in your learning, [and] they are willing to adapt [for you], I think that shows the teacher cares about you and they are willing to change so you have the best learning experience possible.

As may be expected, how students perceive the attitudes of teachers toward them and their capabilities as learners, and the attitudes teachers reveal vary greatly across the total spectrum, and across the participants in this study. The impact of those attitudes, real and perceived, is nevertheless noteworthy.

A very common attitude that teachers reveal, both subtly and otherwise, and students perceive is that of *expectation*. The students who participated in the survey for this study were no different. For example, nearly twenty percent of students perceived that the collective staff at their schools did not expect all students to go on to college. While college is certainly not the end goal for every student, it was telling that one in five minoritized students had internalized this lower expectation, and perhaps equally telling, only 18% of those surveyed strongly agreed that staff saw college as an option for all

students. Nevertheless, one must acknowledge that nearly 80% of students across the two buildings believed their teachers had college expectations for them. Again, however, a disparity existed in the degree to which students at each building agreed with that statement. Over twice as many students at HJ *strongly agreed* (48% compared to 21%) with the statement, and slightly over twice as many students *agreed* (43% to 21%). Also thought-provoking was that 20% of students surveyed at Mason Springs did not feel teachers had high expectations for them, with 12% disagreeing or strongly disagreeing.

More specifically, 75% of those surveyed could identify a school staff member who had taken an interest in making sure these students were prepared for *college* success. While plenty of great teacher-student relationships can be built on the here and now, it is more than a little concerning that 25% of students did not perceive that they had an adult taking interest in their academic life after high school. It is important to note here the number of adults with whom each student interacts in high school, and also the fact that in most high schools, all students are assigned an academic counselor whose primary goal is providing this exact type of support. It would seem, then, at Mason Springs HS and Horace James HS, from the student perspective, teachers were perhaps concerned about students making their way through their own courses successfully, but not necessarily as intensely with the holistic picture of the students' high school experiences being a gateway to college success, which, of course, could also impact student movement toward advanced coursework and the benefits of it.

There are certainly other components of teacher attitudes that impact the number of minoritized students willing to and encouraged to pursue advanced coursework. As veterans of teaching AP or at least advanced level courses, each of the five teachers who

participated in the interview process had a fairly thorough personal understanding of what a typical advanced coursework student looked like.

For example, in general, the perceptions and attitudes among the teachers interviewed for this study were that advanced coursework students come into those courses, or should come into those courses, already equipped with the skills, abilities, and other advantages necessary for success in rigorous coursework. This preconception alone can derail any intentional effort to expand the clientele of advanced courses to include minoritized students.

All five teachers agree on some level that typical, and to a large extent “successful” advanced coursework students had well-developed “soft skills.” Wayne, Dana, Scott, the three teachers interviewed from Mason Springs High School, talked about students who were highly motivated and highly organized, and as Wayne stated, students who were “hard chargers.” Scott’s experience with advanced students led him to conclude that the reason his students were motivated was strictly about how it prepared them for not only college, but specifically college programs that require high level math skills. Wayne also qualified his answer by adding that, as opposed to it being a case of advanced students having these abilities and others not, he believed that all students had a lot of natural abilities, but only some of them got developed. Interestingly, Ed, a math teacher at Horace James High School, made no mention of qualities that typical advanced coursework students had within them; rather, as explained later in this chapter, his definition of the typical student was exclusively about the outside influences that acted on the students that made them the typical advanced coursework student.

Both Wayne and Ed considered personal responsibility a “huge” factor for successful students. Ed defined such responsibility as doing what you were told even when you do not feel like doing it. Wayne and Dana mentioned personal organization first. In Wayne’s viewpoint,

Everybody who comes into an honors class has the mental capacity to do well in the class, but for a lot of people, their systems fail them...not having materials, not taking care of business when it needs to be done...I tell them to find a system that works for them...and then seeing [organization] as work, as a separate course. I think the really good students see it all (high rigor courses) as the same thing. It’s all one subject: figuring things out. That’s the subject, and there are multiple [content areas to apply] that.

It should be noted here that in Wayne’s assertions, he more than hinted that mental capacity for success in advanced coursework was something students taking those classes *already had* when they arrived at the classroom door, as opposed to being something for which they received support in *developing*. Moreover, the onus for determining an organizational system that helped a student be successful fell to the student alone, not the teacher or the system that was educating them. It was only momentarily in his commentary on the challenge that students had of making coursework relevant to their lives, and subsequently interesting to them, that he acknowledged, “I don’t think we do enough to help encourage that connection [between their lives and the material].”

Similarly, Dana emphasized that students already had it when they arrive when he explained that “you can often tell they have had note taking strategies along the way” and that skills like writing in planners was something “that has been emphasized to them.”

Dana and Ed spoke to the importance of initiative, which Dana illustrated as “students who write in planners, take notes without being asked, and kids who are willing to seek out help and are comfortable talking to and approaching teachers.” Ed explained how initiative manifested as being students willing to “take something [like computer science] that they haven’t really had a lot of exposure to...and see that there may be a job for me,” and a willingness “to continue to ask the right questions. I have a kid who comes to me at least every other day. He’s doing what he should do but if he weren’t doing that, he would probably be maybe passing. Right now he’s got an ‘A.’” Further, Ed elaborated that initiative is dependent on *hope*. He believed that people did not have initiative, himself included, “if you don’t see a hope or reason for the effort. So when I go around and talk to these classes and try to recruit, I am trying to offer them a hope that their hard work will pay off...so they can have that initiative.”

Scott and Wayne emphasized the frequency with which they saw inquisitiveness in successful AP students, or as Scott described it, “being able to think about a situation and wonder. Being able to look for and find patterns.” Wayne explained it in a slightly different way:

Part of that is a student responsibility: how do you customize those things, how do you find [your] interest [in the curriculum and course material]? If you say, ‘this is boring,’ you’re telling me about you. You’re telling me you’re bored. You’re not telling me about the material. Dig into the material; there are a lot of people who found interest there. I bet you can if you look for it.

Successful AP students had the inquisitiveness, or forced themselves to be inquisitive, to look for the value and interest, even when their innate passion and interests were in other areas and disciplines.

Dana and Scott both discussed that successful AP students had excellent communication skills, or certainly understood what it meant to communicate effectively and how and when to do so. Dana spoke about interpersonal skills, “just being able to function with other kids in the class or to communicate with the teacher,” while Scott concentrated more specifically on students engaging with the course content and then “being able to communicate verbally so [they] can discuss something and share insights...the course is conversational in nature and they have to be able to share [out loud].”

Val was the only teacher of those interviewed for this study who spoke to work ethic and resiliency, or what he called “stick-to-it-iveness.” But more than listing non-cognitive factors, Val was the only one who stepped back from a focus on factors to talk instead about their philosophy on *ability* in general, and its relationship to content knowledge or natural intelligence:

I think non-cognitive factors are the most important actually. One of my favorite sayings to give to students is ‘smart isn’t what you are; it’s what you get when you work hard and here’s what hard work looks like.’ I am firmly of the belief...that anybody can do advanced coursework, but they have to learn how.

There were exceptions to the staff perceptions at times as to what advanced students look like. Some of the teachers that were interviewed left the door open to the non-traditional assumptions about students. Wayne, for example, while acknowledging there were

definitely clichés that one thinks of when asked about a typical advanced student, partially defined typical with its antonym: atypical:

There are some that are highly organized and highly motivated and have taken all sorts of other advanced classes and are involved in music and activities and all those things. There are some that aren't doing all or any of those things. There are some that aren't tremendously motivated, and some that are pretty sharp but not all that enthused.

Val also believed this idea of a typical advanced student was *changing*. While he acknowledged that it may have been a blip as opposed to a trend or new reality, it was definitely noticeable presently:

If you asked me [to describe the typical advanced coursework student] two years ago, I definitely would have [left it at] intrinsically motivated hard worker. I think now the hard worker part is probably still true, but I think there is more extrinsic motivation. I think, at least this year, my students...in general need extrinsic motivation...I've certainly felt that way and in talking with some of my colleagues in middle school, they seem to see more and more of that trend also, so I don't know.

More than one teacher interviewed also spoke of characteristics of the typical advanced coursework student that were more the result of their place and privilege than a quality or skill they learned or developed. Wayne described "kids that have a wide range of backgrounds...an environment where they've been able to develop a lot of their natural abilities...you know, depending on...it's a nature/nurture issue." Dana spoke similarly about the students he encountered in advanced courses:

[They] are usually the ones that are probably advantaged in their family lives.

They know how the system works kind of thing [sic]...and I am guessing they have parents that encourage them. I think the socioeconomic piece probably plays into the advanced courses pretty heavily.

In Scott's case, as a statistics teacher, he encountered students who took his class solely because they had been counseled into it. Ed's advanced students were often "coming from where their parents are." Given the location and community demographic of the Horace James HS boundary area, Ed's insinuation was that the highly educated, highly successful parent base of his school translated into parents doing a lot of pushing of their children into advanced courses like his:

Their parents are already having that super high value for education, and are in highly educated jobs. You can see it when you talk to them at conferences. They come in with the [company] badge on their shirt or coat or whatever. So I think for most [of the students in advanced classes], there probably is the distinction [of being pressured by parents.] Some of them are minoritized students, but are from highly educated minoritized parents.

Wayne was the only teacher of the five interviewed who drew attention to the typical student's ability to *adjust* to the challenges of advanced coursework:

There are some that don't have a lot of natural ability with language but are working at it, improving their skills. I say everybody's got to make a little bit of adjustment to standard written English. Very few of us speak standard written English just in our daily lives, so standard written English is kind of a second

language for everybody, but for people, it's more of a second language, than for others.

Beyond simply their attitudes about advanced level students, the five teachers interviewed for this study were all over the continuum regarding their attitudes about the support they or their schools provided or should provide to first-time AP students or all AP students, for that matter. Not all of them were even aware when a student arrived in their class as a first time AP student. It is also important to note here that *provide* has a wide range of potential meanings, from something first-time students could choose to something teachers delivered because they know best. There was also certainly diversity in what and how these five teachers thought about persuading minoritized students to enroll in advanced courses, and subsequently supporting them so their chance of success was maximized.

Val and Scott both spoke to opportunities they had taken to coach or encourage students they had had in lower level or feeder classes to continue on and take an AP course as part of their progression. Dana answered similarly, but suggested that instead of Mason Springs' enrollment process being solely about self-selection, an emphasis was sometimes placed on identifying--purposefully and intentionally contacting students and all but placing them in advanced courses. Wayne added the idea of treating all students with high expectations, helping them be organized, if they were not already so, and *maintaining* high expectations for all students once they had them in their courses.

In hearing the teachers answers to a question about helping a student decide which level of course to take, one thing very few of the teachers mentioned to the students was any level of assurance of assistance and support, be it from individual

teachers or the system built around the students. While there was a general impression across all five teachers that they would tilt toward encouraging students to take the advanced track, it was not because they were confident they or the system would provide them what they needed to fill the ability gap and to be successful.

At Mason Springs HS, AP Statistics was a popular choice among one-time-only AP students because it had no prerequisite, other than the state requirement of algebra 2. And yet, in spite of his course being a hotbed for first-time and one-time-only students, many of whom are minoritized students, Scott did not even actually know who the first-time students were, or support those students any differently:

In terms of how they are supported, I rarely have names attached to it, so I would say there really isn't any specific support for a first time AP student. It's just that you're in the class and you do what we do. So I'd say the expectations are the same for everyone in the class and there really isn't any support for a first-time AP student.

While Scott believed this idea of treating everyone the same was perhaps the only means to fairness or equity in terms of expectations, the students participating in the study saw fairness or equity in very different ways. One HJHS student, for example, saw the responsibility of the advanced course teacher this way:

It's important to have checks and balances, where if individual students case by case have issues with things or are having trouble connecting or understanding that there are allowances made for that [student] and...steps taken so that student can still succeed despite [things] like outside environmental conflicts or individual mental health or personal conflicts that might be going on.

Certainly, this perspective was a far cry from Scott's belief that all students got the same treatment or other teachers' lack of awareness of which students are first-timers or for which students advanced coursework might be a struggle.

Ed, who teaches in the same school and same department as Val, presented very similarly to the teachers from Mason Springs in his lack of awareness of which students in his class were first-time advanced coursework students, and also in the absence of any commitment to or focus on supporting first-time students. His AP computer science course used to have no prerequisites, but the department added them five years ago. Although he publicly stated that his goal was to get every HJHS student to take computer science, his approach to those students and how he focused his recruitment energy on students in upper level math courses indeed suggested otherwise.

In fact, there was an undertone to Ed's explanation of the range of students he wanted in his AP class and the multiple paths through which they got there that either was, or ended up being discriminatory. He described how every January, he went into the upper level and advanced math courses and recruited students for AP computer science and welcomed them regardless of their completion of the prerequisites. Simultaneously, he was encouraging students to enroll in the introductory level computer science courses (the *mandatory* prerequisites), who he said were "probably the more traditional, uneducated parent route, in [the] sense that they could probably take the intro class, still starting knowing nothing and, hopefully, progress through that." There seemed no focus on meeting students where they were, and instead, a focus on students essentially *figuring it out*.

Wayne was definitely more willing than Scott or his other Mason Springs colleague Dana to arbitrarily push students toward advanced courses because of the potential benefits, especially students for whom the AP course would be a significant challenge: the borderline kids. He led his answer with, “[I’d say] do it. I’d say do it even if your grade suffers.” He was also the only one of the three who suggested a pathway past any struggles that would arise, saying, “if you have trouble, talk to me and we’ll figure it out.” These borderline kids presented the biggest challenge to Dana for course-taking recommendations, but in the end he did seem okay with pushing them ever so slightly toward the advanced course:

The borderline kids are tough...where they could easily go to a general education class, so I say, ‘If you really like English, if you really like being challenged,’ and then I talk with them about [how] there’s nothing wrong with signing up for a class that will challenge [them], and [they are] going to be around stronger students that are going to elevate their performance as well.

Certainly, the number of perceptions and attitudes will be as rich and diverse as the number of teachers in a given school or system, but two things seemed abundantly clear: these teacher attitudes were long-developed and in many cases, deeply entrenched; and, they were bound to have an impact of the pathways students follow through their educational journey, particularly those students who did not possess those very attitudes that their teachers held.

Systems and Culture

Educators spend and have spent a lot of time and resources thinking and theorizing about the types of programs and supports needed for all students, but

particularly minoritized students, to be more successful. The truth of the matter is that a large percentage of high school students will be successful without additional interventions meant to alleviate their struggles and will successfully pursue learning at the highest levels of rigor available to them. But for those who need that additional support, that additional scoop, or that intentional intervention, getting it can be extremely difficult, and may mean the difference in their participation in an array of classes that will provide a more rigorous academic preparation for what lies ahead of them after high school. And for some students, like this one from HJHS, it can mean even more:

In a very crucial developmental part of someone's education life, if they reach a speed bump and fall off, if they don't have someone to help them back on, then they just continue falling down. In a lot of these situations, there's great opportunity for stuff to be fixed and for the person to thrive, but if the system isn't there to help them, then they sort of lose all hope and continue cascading down.

While the description may wax a little bit emotional, it is nevertheless an important viewpoint to know that students not only see the value of these classes and getting the support necessary to be successful in them, they also understand the longer-term ramifications of not having access to those classes or the support they may need.

To this point in our country's educational history, the resources, the thinking, the theories, and the interventions have met with a persistent opportunity gap. It stands to reason then that if an answer to the question, 'why is there an opportunity gap between minoritized students and white students accessing advanced coursework' were easy to find, it wouldn't still be a question decades after educators began to grapple with it.

If there was one thing on which the group of teachers interviewed for this study agreed related to the gap, it was the difficulty of determining why it continued to exist. As Val stated simply, “If I had the answer to that, I would write a book and go on tour.” Scott agreed, “[It is] utterly perplexing.” Dana’s response was filled with phrases like “I am guessing” and “I suppose,” while Ed’s answer was filled with questions of his own. That said, all five did share some thoughtful speculations about the why, including considerations about parent advocacy, familiarity and comfort, language, how dominantly white class rosters perpetuate even whiter class rosters, and patterns of low expectations for minoritized students.

Where these five teachers really came together almost as a collective voice in their responses to the question about moving and supporting minoritized students in advanced courses was in the clarity with which they spoke about the systems at Horace James HS and Mason Springs HS not serving those students as well as they could or should. Places where satisfactory efforts are being made in both institutions seemed either accidental, anecdotal, or more about getting them in as opposed to supporting them appropriately once they were there. Their testimony and word choice made clear the lack of any organized system for getting minoritized students enrolled and supported.

Val *guessed* that teachers at the lower levels need to be aware of how minoritized students were performing and that they were capable of succeeding with a rigorous curriculum, indicating that “by the time they are seniors, there’s not a whole lot else we can do.” Val was much more definitive, however, in his belief that the current setup was not the answer. He did not believe the system at Horace James HS was set up to teach students how to do advanced coursework. Instead, it was set up to work with students

who have already figured it out. Either that, or it was set up by adults who believed either the students had already figured it out, or should have already figured it out by the time they got to the advanced classroom door:

It's interesting. I'm also the vice-president of the local union and our executive board met with the district cabinet yesterday and we were just having a discussion about how we change the model of how we do school to meet kids now. Because kids are different than they were...even ten years ago. How do we make it more meaningful for kids today? I think when we can answer *that* question, we'll have [the answer to how to help them learn to do advanced coursework] too.

In Dana's suggestion about identifying students, he also *guessed* that some of that went on--teachers selecting students for advanced courses that they maybe would not otherwise select, but acknowledges the system did not promote it:

Because of the self-selection nature of the courses perhaps there are some higher fliers among minority students that just aren't self-selecting and maybe a better system of identifying kids by their performances [would be good]. [The staff at Mason Springs HS have] never directed kids--put them in classes because of their performance. They've always been able to choose. [There could be better] communication between teachers...identifying those kids whether it's middle school or high school.

Wayne further strengthened Dana's claim that anything that was happening was not part of an organized plan:

I don't get out much. I don't know what happens in other classes. I don't know what word, deed, or inflection, what kind of messages get sent as far as

expectations, whether they are the same for everybody or not, I don't really have any feel for that.

The other teacher from Mason Springs, Scott, rounded out the MSHS teacher analysis of not only their school's system but also the state system, and how they worked against students who might otherwise have been willing to engage in an advanced level course, in his case, like AP Statistics:

I've tried to coach them toward choices beyond [the regular] level, but the students who get to that point have been so coerced. It seems like we mechanically disengage students through the required math courses with state standards, that when the kids get to that point [of having choice access to AP courses], they are just *done*. I'm out. That's it. They just don't want to hear anything of it. And regardless of ethnicity, gender, or anything else, it's just there's a lot of students that are sick of trying to be in a math class.

There is a curiosity to all of these responses in that all five teachers illuminated an issue with the way the adults and/or the system was coming up short in its pursuit of increasing its minoritized student population in advanced courses. And a majority could talk conceptually about what would help, but while the need for a system-wide effort seemed clear to them, an urgency for moving toward such an effort seemed, well, not urgent, in spite of living breathing examples of the human importance of such an endeavor. It was visible with the students Wayne worked with in DIG, and in this example that Val shared from his current section of an 10th grade advanced class:

I've got some students who are in 10th grade honors now...this one girl lives maybe five or six blocks from [Horace James High School]. I see her walking

home every day. We always wave and she always says hi to me in the morning. She's from Mexico and she wouldn't have gotten familial support to push her to be accelerated either in middle school or elementary school. So I think I've kind of formed a bond with her just because I pushed her and she was really happy that I did. [Our first parent teacher conferences of the year], her dad stopped by and thanked me, which was pretty cool.

These teachers seemed to illustrate that part of the issue was being too close to the problem (ala the forest for the trees), or in the fact that the minoritized populations were small enough, or new enough, or had not been helped in developing advocacy skills enough that other issues and concerns took priority and precedence with too little resistance, or concern, or even outrage. It seems a feasible step to move from recognizing and admiring the problem, to being compelled to act. Just how *to* act will be discussed further in the next chapter.

Student Views

The students who were interviewed for this study helped shed additional light on the systems in which they were functioning as students. Their beliefs and perceptions about that system illustrated what messages those systems were implanting in the minds of minoritized students who attend their schools.

Being a *good* student at Horace James HS, at least in the eyes of the interviewed students, was mostly about *student initiated* effort and action: asking for help, listening to the teachers and other adults, being respectful, asking questions, getting homework done and on time, communicating with peers and teachers, and making the decision to work hard and develop good study habits. One particular student further confirmed this

perspective that the responsibility of being or becoming a good student fell to the students themselves, but offered up an illustration that focused more on the idea of being compliant to a rigid system structure as opposed to a set of developed personal characteristics:

I think you have to be able to work in a learning environment that is very set up for textbooks...if you have trouble traversing that kind of rigorous academic course content involving textbooks and stuff like that, that isn't as hands on like if you're an aesthetic learner...it's not very conducive [to your learning]. I think a lot of kids who are really intelligent sort of lose out on...opportunities because of that...you need to be able to [work] within that system.

Although the emphasis on student initiation was unwavering with all of the students interviewed from HJHS, one student, Gabrielle, mentioned that it was important for a student to be “communicating with their support system, if they have one.” While she did not suggest it was the support system’s responsibility to act first, one could conclude that the existence of a support system was a critical component to a student’s effort to move from average to good, and from good to great. Janet suggested that resources and support people were there for the students, and were ready to spring into action. They just needed students to take that first step of asking for help.

Other students described a school environment that applied great pressure on academic performance, particularly in STEM classes, and that was great for those in sports and co-curriculars. Those students seemed to have the ear of teachers and administrators, leaving not much advocacy for the uninvolved who were not naturally

comfortable sharing their voices or truth. One student, Desiree, noted student life at HJHS through the lens of a minoritized student:

For students of color, it's a lot harder to navigate...There is not a single person of color who is a teacher here to my knowledge, or an administrator. Most of them are paras or janitors or other lower level staff and...that has significant effects psychologically on students of color here in terms of where they can connect, where they can access resources and make connections.

Desiree saw racial inequity in a multitude of ways at HJHS, not only in the diversity of the staff who worked in the school. She had concerns about insufficient cultural integration efforts on the part of the school--including issues with what she considered superficial attempts to address the issue (ie. culture days where students were asked to sit next to a student of a different cultural background at lunch). She was also frustrated by what she saw as a dramatic disproportionality of minoritized students moving through the school's discipline system, and a similar disproportionality in the ratio of whites to non-whites in advanced courses.

The latter issue she saw as a systemic problem where programs at the elementary level attempted to be diverse, only to have the number of minoritized students participating "taper out" as they moved into and through high school. This had a layered negative effect in that not only were students left out, but the lack of diversity in those courses compounded the difficulty for those students who managed to remain there.

Similar to Horace James HS, being a good student at Mason Springs HS, at least according to the students who participated in this study, came down in large part to students taking responsibility for their learning, achievement, and performance. In fact,

only one student even mentioned that a component of being a good student was seeking support from the teaching staff. The others were exclusively focused on what students needed to do, including paying attention, doing the work and keeping up, being respectful to teachers, maximizing their effort, being welcoming to those around them, and perhaps good advice for all of us, “not being dumb.” One particular student tied the importance of those positive steps back to race and diversity:

People of color are generally stereotyped as not as smart or not up to par as other people. And showing people that we have the education and that we are able to do it and going the extra mile and just putting all that work into it...it shows that you are really trying. As long as you're trying your best, I mean you can honestly just forget the rest of what other people think.

Some talked about the reality of their systems being an obstacle to their pursuits-- or at least an obstacle to pursuing what they knew to be in their best interest as they moved through their futures. Desiree in particular, in looking at the course selection process for all minoritized students at Horace James High School, believed the system worked against them in a way that discouraged their pursuit of advanced coursework:

I think a sizable factor is that it's not made to look like the path you're supposed to take if there are not really role models or people to follow into that path. You don't really feel like you belong there...it feels like it's not meant for you...so why participate in it? There are students of course that want to go against that, they want to do what they want to do, but in general...if it's not meant for you, you're not going to take it.

But it appeared to be not only a systemic issue within the school itself. As another HJHS student acknowledged, the communities at large in which minoritized students lived play a role, in a way that was surprisingly opposite of what we would typically think of when we think about parent and community pressure:

I think it's primarily caused by systemic reasons and then as well, students of color aren't really encouraged to take those kinds of classes and there's also sort of a negative feedback loop of the community they come from where if you take these classes, these are the classes just for white kids and then it is sort of the fear of being white-washed.

Perhaps most concerning, and as a result, most in need of attention in regards to the culture and systems of schools and course selection, was the juxtaposition of the awareness of the problem among teaching staff, and what came across as efforts to guess the solution and a low sense of urgency to address the problem. Efforts to increase the enrollment of minoritized students in advanced courses at the system level have to be purposeful and intentional. And once there, systems need to have in place purposeful and intentional support mechanisms to maximize students' sense of comfort and belonging, and their opportunity for success. Some minoritized students will end up in those classes without this intentionality, and many will perform adequately once they get there. But schools have to acknowledge the culture of their system and adjust it in order for the representation in these courses to shift and stay shifted. School personnel need to learn from students what obstacles the system has created for them. For example, students in this study identified these troubling components of their systems:

- Students do not expect teacher-initiated help. They have been taught it is all on them;
- Students feel the system is harder to navigate as a person of color;
- Students don't feel they belong in these advanced courses.

By developing an understanding of how students perceive the school environments in which they work every day, the adults will give themselves the chance to understand how those systems were created and to inform their understanding of the thought processes involved in course selection, and what ultimately moves students to enroll in the classes they do.

Motivation

Martin Haigh explained that the education concept Invitational Theory argues “learning is enhanced when learners are positively encouraged or ‘invited’ into the educational experience...and is constructed on four principles: respect, trust, optimism, and intentionality” (p. 299). The students participating in the interviews for this study by and large lent credence to the theory. The students were asked to respond to opposite hypothetical circumstances: first, what impact it would have on them if they were encouraged by a school staff member to take an advanced course; and, second, the impact of a staff member discouraging them to do so.

It is important to note here that these ten students from Horace James HS and Mason Springs HS, as well as all of the students who participated in the survey, were motivated by a diverse array of forces when they made their course selections. The ten had taken a collective total of 15 Advanced Placement courses, with nine having taken at least one, and one student having taken more than two (one student at HJHS had

completed three AP courses). In addition, the students had taken an additional 5-7 accelerated or honors courses (courses each school identifies as more rigorous, but not part of the official College Board menu of AP courses).

Well over half of the students indicated that encouragement from one staff member would “definitely” cause them to take an advanced course, in one case describing the impact of the staff member’s comment as “immense” --immense enough to single-handedly make them comfortable. In another, a student commented that it would make them feel proud of the potential that that staff member saw in her. One student from Mason Springs said they would take the course because “I’m going to trust his or her advice [as the teacher].” Another from Horace James was confident that “the staff members have our best interest in mind...and know your interests and your potential.” And another indicated that they would take the course on the teacher’s encouragement “even if I don’t have friends in there,” a strong statement given the previously mentioned importance of familiar faces in advanced classes for this group of students. Finally, and perhaps most profoundly, one Mason Springs student said poignantly, “If they believed in me, then I should believe in myself.”

Perhaps not surprisingly however, the impact of a staff member discouraging them from taking an advanced course was also enough to keep almost all of them from enrolling in the advanced course, and the discouragement was often considered significantly more impactful than any encouragement could be. Emotions among the students ranged from sadness (“I’d feel dumb because they don’t see potential in me”), to confusion and frustration to anger: “A teacher is there to help you, to advance you to the next level. And if they can’t do that, then why are [they] teaching?” And for one student

from Horace James, she could even imagine the impact of such a comment even if she went against it and took the class anyway:

It would really impact my confidence in that class [if I ended up taking it]. When you struggle in that class...you are just going to keep kicking yourself and say 'she told you so, he told you so.' It will always be in the back of your head that you're not good enough.

Three students indicated they would question the teacher about their recommendation, and one acknowledged that it could be that the teacher didn't want them to be too stressed about coursework--"like they are genuinely looking out for your wellbeing." And one MSHS student defiantly stated that unless he already really liked the teacher, he would take it *because* the teacher told him not to.

For the most part, however, it was obvious from the responses of these ten students that a recommendation discouraging the students from taking an AP course would have lasting negative effects, illuminated in this from a Mason Springs student, who said, "I would feel as if I was downgraded, as if I wasn't worth much."

The responses of those hypothetical scenarios, of a teacher either encouraging a student to take an advanced course, or discouraging them, are made more thought-provoking when juxtaposed against the reality of what the surveyed students experienced at their two schools. When asked whether or not school staff were helpful and supportive in helping students choose classes that would help them reach their goals for education *after* high school, 73% of respondents agreed on some level that they readily got assistance from staff during the course selection process. This was not completely alarming, necessarily, but it did mean that 27% acknowledged that, on some level, staff

had not been helpful or supportive in steering them toward college preparatory courses. Perhaps more alarming, however, was that 13% of respondents *strongly* disagreed, and one in five strongly disagreed or disagreed.

Ironically, the registration process at both high schools involved individual meetings between students and teaching staff advisors designed to ensure students were getting registered correctly, and only 60% of the students who participated in the survey indicated that any adult in their school had encouraged them to take an AP class. That means 40% of the minoritized students who responded to this survey sat down every spring with a staff member from their school and had never heard that adult, or any other adult say, “You should take an AP course.”

Outside sources of motivation, or perhaps pressure, to take advanced courses were present at both schools as well, but in starkly different degrees. Three quarters of the students surveyed from both schools indicated that they received encouragement at home to take advanced courses. However, 32% more students at Horace James High School indicated that they get encouragement at home to take advanced coursework, as compared to 54% of respondents from Mason Springs.

That said, it was clear from the responses of the teachers who participated in this study that they did generally understand that advanced coursework was of value to all students and on some level wanted more students to participate in rigorous coursework.

The Mason Springs math department did not offer a non-AP course in statistics, so for Scott, the first advantage of taking the AP course for students was the opportunity for them to take statistics, and as a result, to be able to say they took an advanced course. “It’s not academically difficult,” he explained, “If you can get the Algebra 2 credit (the

math credit you need to graduate from a state high school), you can probably make your way through AP statistics and learn something practical.” The picture that Scott painted, of the AP Statistics course being both accessible from the prerequisite standpoint and also from the course content standpoint, considered alongside the small minoritized student enrollment in the course, seemed to reinforce the idea that a much more intentional effort by teachers and administrators at Mason Springs was necessary and *feasible* to bring advanced course enrollment and building demographic numbers into better balance.

Both Scott and Ed saw the common benefit of the chance to earn college credit with a successful effort on the AP exam. Scott extended this benefit beyond the obvious tangible pursuit of college credit to point out the opportunity to check a course off their college list of requirements, and also to make their eventual landing on a college campus more comfortable:

There are so many college majors now that require an intro to statistics course as a precursor to something else, that if they do this here, they can step on a college campus and go ‘Oh, I’ve done this before. This is all old news.’ So just that experience of getting college course work in before they step onto a college campus is good for a student.

Beyond Ed and Scott’s perception of the concrete and perceived value of the experience as it related to a student’s matriculation to post-secondary education, Dana, Ed, and Wayne all spoke to the benefit that the advanced classroom *roster* held for enrollees. Ed put it most simply that one advantage was “the people that are in there.” Dana and Wayne echoed Ed in their beliefs, perhaps a little more poetically. Dana explained,

You know it comes down to the levels of thinking. Thinking about my own children...if my kid was on the border of an advanced course and a regular course...there is something advantageous about [being with] kids that are high fliers. You know, I see evidence of that, that the lower kids will work harder because of the atmosphere there. It is somewhat cliché, but it is a more positive atmosphere in the advanced courses, just about being in school.

Dana's response here was noteworthy in that their illustration of their own children, who were students on the borderline between regular and advanced, suggested that they had internalized the value of advanced coursework for those students who maybe did not come in with all the necessary skills in place; rather, the experience those students had with secured advanced students around them raised them up in a way that a regular version of the same course would not. In truth, Dana was echoing the research that declares a long-term benefit to students for simply showing up to an advanced course and having a wide range of academic abilities within the class roster (Cisneros, et al., 2014). It is also important, however, to note here Dana's use of descriptors like 'high fliers' and 'lower kids', which seemed to imply that these two groups were pre-established and distinct, and further implied that in Dana's mind, these courses were not so much giving students equal opportunity, but rather they were an opportunity to give students less familiar with higher rigor courses a chance to benefit from students more experienced with increased rigor.

Wayne's analysis cut a bit more toward the idea that advanced students benefit from a community of advanced students, suggesting that the advantage is in the interchange between these students, because they tend to be more *interesting*:

People who either want good grades for their transcript or want to dig into the world more are more interesting people. I mean, there's more there to notice, there's more there to talk about and I think one of the greatest benefits...is the people you're in it with are motivated somehow. It doesn't mean that kids in regular classes aren't interesting, but they aren't that interested in what they are doing here.

Similar to Dana's implication with the use of the descriptors 'high-flier' and 'lower kid,' it is important to note here Wayne's perception of how interesting students manifested as those who wanted good grades or wanted to dig into the world. While it is possible that they were indeed interesting, it seemed very likely that numerous other students who manifested as interesting in a myriad of ways simply did not present that way in school because they did not see themselves reflected in the place, the classroom, or the curriculum. With this in mind, Wayne's idea of what makes students interesting was problematically narrow.

At Mason Springs, for both Scott and Wayne, as they worked to help students determine their academic path at registration time, it was also important for them to ask students what they wanted before offering course-taking advice. For Scott, it was important to know what the student's career interests were; that answer would determine if he suggested a top-tiered AP course (future engineers), his own AP Stats class (future biologists or sociologists), or a regular math course (students who declare they aren't going to college). For Wayne, it was more philosophical:

The beginning of the conversation would be, 'What do you want out of school?

What do you want to do? What are you *willing* to do? If you are willing to invest,

if you are willing to dig in, you belong [in an advanced course]. And if you don't [belong], you might still find it more interesting.'

These teachers' counterparts at Horace James HS leaned more toward pragmatism in their counseling of students, in a way similar to Scott's "What do you want to be" approach. For Val specifically, it was a series of straightforward and in some cases direct questions he asked of prospective students, and not necessarily questions designed to persuade:

- How much time do you have to dedicate to homework?
- What's your family life like?
- How many other advanced classes are you in?
- Can you budget this time?
- Do you really love math?
- Is math really the thing that drives you? If it's not, if literature really drives you, you should try AP literature.

These questions, or at least the objective nature of them, seemed incongruous with some of the statements of belief and philosophy Val shared over the course of the interview-- statements that suggested they understood what minoritized students were up against and that schools, at least their school needed to evolve to support them more effectively. The questions, perhaps, illuminate the difficulty of bridging the distance between doing what you may know to be right and what is safe.

Ed started with simply asking how their year was going, and then asked students to illuminate how they were performing grade-wise, and how much work they were putting into getting that grade:

I've had kids who have spent five hours a night on homework in honors and they get an A, but man, they are working hard. And that's great. I'm glad they do, but not all students would be able to pull that off. If you're working 5 hours each night and getting a D--that would be a big question.

All that said, however, Ed ultimately wanted, as he hoped all teachers would want, to encourage them to take the more rigorous courses. His main concern in doing so was simply that "we just don't want to set anybody up for failure," as if to suggest encouraging a borderline student to take an advanced course was like spinning a top and not knowing how it would spin or where it might land.

That said, he did acknowledge, in reflecting on particular students who really struggled in his class previously, "Maybe I could have done that differently, like to say, 'Okay, I'm a little worried about you, but how are we going to make this go.'" It is perhaps the question from which educators stand to gain the most in this pursuit of making the rosters in advanced courses mirror the demographic of the schools in which they exist.

While their reactions to the hypothetical questions of being encouraged or discouraged by school staff to take an advanced course put an emphasis on external motivating factors to register for those courses, internal motivators certainly played an important role as well for the students who participated in the interviews. One such motivator was concern for how the selections will impact their future interests and goals--specifically, preparing for higher education or what lies ahead of them after finishing high school.

Student Perspectives

Students from both schools talked about selecting courses they believed they needed for not only getting into college, or more specifically a good college, but also for being successful in college coursework once they got there and had a better sense of knowing what programs in which they would want to participate from an interest or college major standpoint. One took this a bit further in considering what courses could potentially allow her to “skip” entry level college courses and benefit financially.

A number of them spoke to being motivated to take courses they knew would be a challenge, or would challenge them in a particular way. One HJHS student explained that she was motivated even if it might mean a lower grade:

I do know that some of my workloads may be heavier than others...but I also think the challenge is good and it's okay to not do well in an honors or AP class because I am still challenging myself where some of my non-honrs peers may be accelerating in that class because it's not as much of a challenge for them. But I'm trying to put a littel bit more of a challenge on myself and I may have struggled with it but that's something that's going to continue to make me learn down the road.

Others indicated a key factor in course selection was either hearing from other students that a course was worthwhile or interesting, or having determined that on their own.

Students across both buildings, but more significantly at Horace James, also indicated that community and parent pressure and influence sometimes drove their course selections, in some cases toward advanced courses, and in some cases, away from them.

Multiple students indicated that their interest in the content was a major determiner for choosing AP or regular courses. In some cases their interest, or lack thereof, was a particular discipline (eg. “I am bad at math.”) and in others it was in a specific subject, like world history, within the larger discipline of social studies. A number of students decided on the advanced course for the challenge it provided, while others by-passed them because they were “a lot of work.”

In situations where the subject matter was available only in an AP course, and there was no “regular” equivalent--like the aforementioned Statistics course at Mason Springs, a number of the students indicated the determining factor was how interested they were to dig into that content. For others, the AP course represented a chance to get ahead of their pursuit of college requirements like world languages, both academically and financially. One student from HJHS indicated it was a combination of what has already been mentioned, but also acknowledged that for her and for many of her friends, there was significant pressure from family to take certain courses, up to a point where she suggested some students’ schedules were completely determined for them by family. Similar to the voices from earlier in this chapter that spoke of the importance of having other minoritized students in the classroom for the sake of their comfort, a second student from HJHS spoke to the importance of who was in the class with her as a means of motivating her to take a given course:

Honestly, a lot of the time...I would think about whether or not my friends were taking the classes...if I had a lot of friends taking the honors class, I would sign up...but if they weren’t then I would only slightly consider it. What my friends were doing [mattered a lot].

Finally, nearly half of the students interviewed spoke to the issue of stress and mental health--specifically, their interest in balancing the workload and challenge level of AP courses with the other things in their lives that were important to them: sports, work, activities, their physical health, and in some cases, their other courses.

Without question, there is a lot for these students to consider, and a lot of influences acting on them as they determine what courses, and more specifically, what advanced courses they will take the following year. Perhaps this window into their perceptions and motivations, alongside the voices of the teachers that work with them each day, can shed some light on ways to increase the number of times students commit to more rigorous coursework.

Considerations Beyond the Schoolhouse Door

Multiple student responses involved the need for teachers to be aware of what lies beyond the school house for these students. Students emphasized the importance of teachers knowing and acknowledging their context: friends, family, life at home, stresses and trauma, and everyday activities that challenged them as learners. One particular Horace James student actually spoke to this piece, or the absence of this piece in her school experience, as the sole reason she had not pursued advanced coursework. Her reality needed something more than what she perceived as the means of support she was being offered by her teachers and her school:

I really can't do that right now because in the morning I have to take my nephew to school and he really doesn't want to wake up, so I can't come in early for help...[and] it's kind of last minute when my brother lets me know I need to come home right away because I'm going to work.

Woven in for some students was the need for a healthy dose of understanding, including one student from Mason Springs who needed teachers to “care about how my personal life [outside of school] is affecting my schooling without needing to ask how and why.” In an era when schools need documentation and justification for providing opportunities that, without that justification, might otherwise be considered “unfair” or “lenient” or “inconsistent”, this request was particularly poignant. It really asked that educational professionals exhibit a high degree of *trust*.

A recipe will periodically be written in a way that, rather than indicating what ingredients are required, will allow for anything and everything that is available in the refrigerator or pantry--rendering the recipe not only impossible to follow with prescription, but welcoming flexibility, creativity, and inclusion. So too should be the recipes for support of students in our schools, particularly those students who have been traditionally underserved by the methods we have used up to this point. Based on the voices of these students and teachers, it is time for the recipe to change.

Chapter 5

Conclusion

As mentioned in the introduction, I have spent the last decade and a half leading a high school similar in size and demographic to the schools selected for this study. My school is a 9-12 building with approximately 13% minoritized students, most of whom are immigrant second language students. Fifteen years ago, I joined the staff at this school in celebrating the dramatic increase in the graduation rate of our EL students which had leapt from near zero to consistently in the mid-90 percent range, and in some years, it hit 100 percent. While the celebration certainly continues for those minoritized students we see consistently fulfilling their graduation requirements, we've done little during those years of celebration to enrich how they are fulfilling those requirements. It is a rare occurrence at best to see those students move from "regular" courses to AP, honors, or other higher rigor courses, and has been consistently rare throughout those fifteen years. While there is some diversity represented in the advanced courses at the school where I work, it's not, nor has it ever neared a level of representation equivalent to our school demographic. In other words, I had a bird's-eye view for admiring the opportunity gap problem.

There were some efforts to remedy parts of the problem over that time, however. A long-standing obvious issue of access in the advanced grade nine science was addressed a few years ago when department members and administrators agreed to dissolve the application process (ie. an application form and an exam that students needed to "pass" adequately to be rostered in the course) and open up the class for all interested students. The process that initially replaced the application was one in which eighth grade

students expressed interest in the class, and administration responded with test and grade data for that student, with a “recommendation” for placement in either the advanced course or the regular. The ultimate decision was up to the student (and perhaps their parents). In subsequent years, the recommendation was removed, leaving the enrollment process an unfettered choice--unfettered in so much as it could be *selected*, not necessarily meaning totally without obstacles. The result of this effort was a better feeling about the process, and little enrollment change to show for it. Similar efforts in the other first year advanced course in English yielded equally unimpressive progress. It was obvious to me that I was, we were, missing something. Not long before, I sat enraptured listening to one of our EL graduates who had navigated AP coursework in high school, found the support he needed to successfully complete the business program at a well-regarded university, and landed a great job for a successful medical science manufacturing company. Now I was staring a looming truth in the face: I didn’t know what the solution was, and that was not an excuse to sit idly by and let the problem subsist, or worse, grow.

This study set out to understand the beliefs, perceptions, and motivations in the process of course selection by minoritized populations in high schools with new diversity, to illuminate potential reasons and solutions for the continuing disproportionality between school demographics and the number of minoritized students taking and *succeeding* in advanced courses. As a current practicing administrator in a non-urban high school, I sought to find, for my study sites, schools that were similar to the one I currently lead for two main reasons: first, the issue of the opportunity gap is alive and well in my own school, and I was motivated by a study that I believed would

help me better serve the constituents that I serve every day in my school and community; second, the current gap in the research: little attention has been paid to the beliefs, experiences, and perceptions of the minoritized students in their course selections, as well as the beliefs *about* them, that ultimately lay the foundation for the existing opportunity gap; and, the vast majority of the research focuses on schools where minoritized populations are large--in some cases, the majority, and where those populations are long-established, as opposed to schools where the diversity is part of relatively new ethnic and cultural diasporas which have largely developed due to processes of globalization. My secondary hope and motivation was that the practices of education practitioners from other similarly-positioned schools and districts could be informed and positively impacted by a study more relevant to their realities.

As I indicated in chapter one, four research questions guided this study at the beginning:

1. What are the beliefs, experiences, and perceptions of minoritized students at two Minnesota high schools with new diversity in regard to course selection?
2. What role do teacher beliefs and perceptions play in the course selection process of students from minoritized groups?
3. What role do school supports play in ensuring that students from minoritized groups enroll in, and have adequate support to succeed in, advanced courses?
4. How can an understanding of these experiences help schools increase participation and ensure success for minoritized students in advanced level coursework?

My initial intent was that here, in chapter five, I would answer each of the four questions systematically and separately. As I collected and coded the data, however, it became clear to me that a much more useful and logical means of presenting my findings, thus answering my questions, was to discuss them in the context of the six themes, or primary factors of influence, that presented themselves inductively during the analysis phase of my study. It was also during the analysis phase that it became clear that my findings would provide answers to the first three questions, but question four was not in the end a research question; rather, question four, or more specifically the answers to question four, are really the components of the *Implications* section found later in this chapter. Those answers also provide direction for potential future research.

In its pursuit of the answers to these questions, this study utilized three research methods to collect data at two high schools: a survey of students, individual interviews with a group of ten students selected from those who completed the survey, and individual interviews with teachers. The data for these cases were collected over a period of two years, 2018-2019. Data from all interviews and surveys were analyzed and coded based on the literature review and theoretical framework. Data analysis revealed six primary factors that influence the decision-making of minoritized students in course-taking in high school:

- Student Comfort
- Teacher Relationship
- Teacher Attitudes

- Access
- Designs of Systems
- Motivation

Primary Factors Influencing Advanced Course-Taking

Student Comfort

From the students who participated in this study, one message is abundantly clear: to get us to enroll in advanced courses like AP, make us more *comfortable and build relationships with us*. Students respond to encouragement of all types, and based on the interview and survey responses from these students, encouragement to take advanced courses makes a profound impact. One of the students who consented to be interviewed captured the sentiment of many of the students in the study when she said, “I know this year I’ve struggled in a class and I’m uncomfortable talking to the teacher; it’s shown in my grades and it’s shown in [how much I enjoy] that class.” Another student also directly linked comfort to higher level learning:

I took a [upper level] humanities class this year...and I know the teacher pretty well who teaches it and having that sort of connection and being able to openly talk or discuss about things in class makes it a lot easier to remember or learn or have connections to the material that you are being taught.

Students clearly not only see a link between comfort, and enjoying or being willing to enroll in a particular class, but see a definitive correlation between comfort and their ability to learn more effectively and be successful in the classes where they feel comfortable. This confirms a number of studies discussed in the review of literature in chapter two that focused on the correlation between a sense of comfort or belonging and

an increase in motivation and expectations (Adler, 1939; Abi-Nader, 1990; Garza & Santos, 1991), and in the case of Goodenow & Grady, especially within minoritized student communities (1993). It also further validates the work of Immordino-Yang on emotion and learning. Immordino-Yang, a cognitive neuroscientist at the University of Southern California who studies the effects of emotions and mindsets on learning explains the potential impact of schools on student brains and their ability to focus on learning:

Chronic and excessive stress and loneliness are toxic to brain development. Stress from threats to emotional safety and feelings of belonging...influences a person's underlying physiology and neural functioning, robbing a person of working memory resources. Such identity related stress impacts cognitive performance...[These] negative effects of stress can be buffered through supportive...relationships, community and school programs (2018).

Beyond the teacher's role in being part of what makes a class comfortable, there is clearly a call here for an intentional effort to increase the diversity of advanced courses *in mass*. Students can be encouraged extensively by teachers to enroll in these courses, but in order for that comfort to be deeper than simply a connection between teacher and student, it needs to include an opportunity for diverse students to see themselves reflected in the students around them. One student was blunt and to the point: she's simply not comfortable "being the only person of color." Wayne, a language arts teacher at Mason Springs HS, agrees: "I think that's an issue: 'where are my friends?' you know? It doesn't necessarily create a hostile environment, but it's not the same." Another student noted

that the discomfort grows throughout the school experience for minoritized students as the amount of diversity around them fades:

It's really disproportionate here...in terms of honors or academic classes, especially the higher up you go. [It] tends to get more and more [white]. I mean, especially if you look at elementary and then to high school, [the number of minoritized students] very quickly tapers out. And for those few who are left, it is pretty difficult for them...there's also sort of a negative feedback loop [that suggests] these are classes just for the white kids and...a sort of fear of being white-washed.

While comfort is only one dimension of what will ultimately narrow and perhaps close the opportunity gap, it is important and notable that something many up until recently would see as unrelated to instruction and learning has such a profound impact on the students for whom the gap matters most.

Teacher Relationships

Bronfenbrenner's conclusion that the relationship between a teacher and his or her students (1979) is certainly confirmed by this study, and admittedly is far from front page news. That said, it is important to note that while these relationships are critical to the lives of all students, they may be even more so for those minoritized students, confirming the work of Beck and Malley (1998) as discussed in chapter two. Such relationships may be not only harder to come by and fewer and far between for minoritized students as they indicate is the result of an already existing burden of rejection, but they must also be forged with and by, in the case of Horace James HS & Mason Springs HS--as well as other schools similar to them, teaching staffs that are predominantly, dominantly, or

perhaps completely white. Student after student who participated in the interviews for this study lead with ‘the teacher’ as the most important element to feeling comfortable, able to learn, willing to take the course, being confident in their abilities to succeed, and being the key to their support system. And again, these relationships are not written into the scope and sequence or the curriculum guide. They are, nevertheless, what matter most to students, even if, in the case of one student, the teacher needs to build the relationship simply for show. As one HJHS student put it, “Having that sort of connection with a teacher and being able to openly talk or discuss about things in class makes it a lot easier to remember or learn or have connections to the material you are being taught,” and another who explained that “when a teacher is constantly checking up [on you], you want to make sure you aren’t letting them down,” seeming to illustrate the importance of that teacher relationship as they would describe that of a father or mother.

Educators simply cannot be caught believing this is a road students can go alone, or on which they can be started, like a spinning top, and left to figure out either the revolutions or the landing place. Further, the level and types of support cannot be standardized or boxed in. As one Mason Springs student shared, “I know a lot of students in this school come to school because they have no [other] support system: nowhere else to go.” Teachers have to be responsive to the individual students, their stories, and be ready to think well outside the box for ways to make the advanced courses something students are willing to pursue and someplace they can be comfortable once they get there.

Another Mason Springs student also emphasized that having a teacher or two as a consistent support system is indeed essential to success--“that one teacher might be the reason they are coming to school every day,” but also emphasized that this can be

particularly hard or challenging for minoritized students in that their support system, certainly at both Horace James HS and Mason Springs HS, is very likely a person or people who don't look like them or have firsthand experience with their story.

Particularly for this and other reasons, the teachers' pursuits of relationships have to be consistent, committed, and *relentless*. There is simply too much at stake when you consider it could be the difference between narrowing the gap, and perpetuating it.

Teacher Attitudes

Equal in importance to the factor of teacher relationships in the selection of courses during registration is that of teacher attitudes. This study revealed two things of note about teacher attitudes: they are long-developed and in many cases, deeply entrenched; and, they are noticed and internalized by students, often heavily influencing the pathways students follow in school. The important thing to note here in the discussion about teacher attitudes is that, like teacher relationships, attitudes are both spoken and unspoken, obvious and subtle, and intentional and accidental. In all cases, they ultimately play an important role in the conclusions students draw about where they “belong” in terms of course selection.

First, how students *perceive* the teacher beliefs about student capabilities, and the attitudes teachers reveal vary greatly across the total spectrum, and across the participants in this study. Their impact is nevertheless noteworthy. Students participating in this study revealed that teachers convey numerous messages to students, from signals about how low or high their expectations are of them, the level to which their teachers seem to expect them to go on to college, whether or not teachers take an interest in their plans for

after college, or even an interest in whether or not they are appropriately preparing for success in college once they get there.

One related conclusion to be drawn from these perceptions students have about their teachers attitudes, both at Mason Springs HS and Horace James HS, is that teachers are perhaps concerned more about how and if students are able to make their way through their own courses successfully, but not necessarily as intensely with the holistic picture of the students' high school experiences being a gateway to college success. Similar to the Delaware school district at the center of VanSciver's research, this attitude can significantly impact student movement toward advanced coursework and the benefits of it (2006). Just as students were being directed subtly and not so subtly in VanSciver's study, so too might students at the two schools in this study conclude that teachers either believe them to be incapable of rigor, or indifferent to whether or not they pursue it.

And perhaps these students' perceptions, even more than challenging educators about their attitudes, ultimately compel educators to circle back to the question of the system itself, and if the system is adequately prepared for the responsibility of ensuring that all students believe that teachers believe that college success awaits them. As an example, while teachers are the focus of this portion of the study, other school staff, including school counselors, play a role in this endeavor of conveying the appropriate attitude to minoritized students about their worth, their preparation, and their potential for success. However, across the country, and certainly in the two study schools, the work of counselors is heavy, and perhaps the volume of their work overburdens them to a point where perceptions that students might otherwise internalize are lost in the busy-ness of day-to-day school life.

A key point of note about teacher attitudes revealed by the teachers participating in this study is that, in general, they have a preconception of the advanced coursework student as one who possesses a significant set of skills necessary to be successful in advanced courses *before* they arrive in those classrooms. Teachers described a ‘typical’ advanced coursework student as possessing a number of cognitive and non-cognitive skills: strength in note-taking and organization; initiative; knowing the system; being responsible; seeking out help without being asked; being able to communicate effectively; and, resiliency, among others. While no one would argue that these are great skills for a student to develop and possess, it’s clear that the teachers believe them to be expected on arrival to an advanced course, and not a set of skills that can or should be taught to students in the course to help them with the course and subsequent courses of high rigor. It’s also important to note that the list the teachers came up with of characteristics of typical advanced students is quite predictable, and ignores the studies of Oakland & Rosen (2005) and Lohman (2005) which point to the success of schools which define “high potential” with terms like creative thinking, leadership capacity, artistic ability, and psychomotor ability alongside those volunteered by the teachers in this study. Lohman’s study certainly confirms the teachers’ beliefs about the importance of qualities like persistence, resilience, and self-management, but again focuses on developing those rather than assuming them.

That said, all five teachers were quick to point out that the process of how students end up in advanced courses is self-selection. While there are some courses that require a particular level of performance in a previous class, or a set of prerequisite courses, the company line at both schools is that if you want advanced courses, you can

take them. That mantra has not, obviously, been the be all end all to raising the percentage of minoritized students in advanced courses.

The teachers interviewed for this study also share a wide range of attitudes regarding the support they believe they or their schools provide or should provide to first-time AP students or all AP students. In fact, their answers reveal that not all are even aware when a student arrives in their class as a first time AP student. There is also certainly a wide range in terms of how these five teachers think about persuading minoritized students to enroll in advanced courses, and how they will support them once they are there.

Teacher answers also reveal that there has not been a lot of purposeful thought about specifically and intentionally supporting first time or minoritized students in the advanced course setting. Teachers talked about general ways they offer additional help to all students but for the most part, the assumption is that if you registered for the course, you are ready to face that challenge. While this attitude is heavily supported by cliches like “pull yourself up by the bootstraps,” it is not in line with what the students in this study stated time and time again they needed: encouragement to enroll and layers of support all along the way.

Access

A student’s belief about and a school’s effort to increase the accessibility of advanced courses represent a wide swath of perceptions, practices, and behaviors. As a result, it’s important to note when considering the factor of access that it not only means different things to different people, but to a certain extent, it’s *ever-evolving* as a factor.

Both of the school sites for this study have multiple advanced level courses that have no prerequisites, and both also have additional advanced classes where prerequisites are completed simply by fulfilling state and local requirements, as is the case with Scott's AP Statistics course at Mason Springs, which he describes as having "no barrier" (completing the state algebra 2 requirement allows students to take that course). From that viewpoint, access to these classes could be considered unfettered, especially when you consider that students from both schools have an academic advisor who assists them with registration each spring and really should be articulating all options, including that multiple AP classes are available to them. Moreover, teachers at both buildings describe the registration process for advanced courses as "self-selected." Students should, given this, universally feel that advanced courses are there for the taking. And yet, of the forty-five students who participated in the survey for this study, nearly 1 in 5 of students across the two buildings disagreed with the statement that any student could take an AP class if they wanted to. Access is clearly more than classes they may and have the opportunity to select.

The teachers participating in the study were to a large degree flummoxed by the variation between what they perceive to be open access and the number of minoritized students who enroll. Scott, a Mason Springs math teacher, perceived that certain students have been conditioned to have low expectations of themselves because they've been conditioned by adults to do so.

In truth, for students, access to advanced placement courses seems to be far less about what is open to them, and more about how open, welcoming, and available those courses *feel* to them. It might be open, but as Ed, a math teacher at Horace James

conjectures, “I don’t think people have initiative if they don’t see a hope for the effort,” or it might be the fear of the unknown:

It’s just scary, you know? They don’t even know what they are getting into...or a minority student may understand what an honors math class might do for them, or what it would entail, [or] what they would learn, or how much harder they might have to work, but that might be scary if they’ve never took [sic] one. [They are] just scared off because it sounds impossible.

A different fear of the unknown matters to the students as well in terms of how accessible the advanced courses feel. While dominantly white classes are, as mentioned earlier in this chapter, an issue of comfort for minoritized students, that whiteness creates for many students a feeling that even though they *can* register for those classes, they *really* aren’t for them. In other words, they *really* don’t have access. This perception was confirmed by more than one student. For example, a student at Mason Springs, said, “[For] me personally, since I know that it’s not as common for people of color to take advanced courses, I like to stick to the lower courses.” Another from Horace James stated it this sentiment rather bluntly:

[White students] can sort of access additional resources that would not have been made available for them had they not been white or something else like that-- where they have a greater connection to the teacher [because the teacher is white as well] that you just don’t really get being of a different background.

Finally, a third simply said that even though they are able to register, “You don’t really feel like you belong there...it feels like it’s not meant for you.”

Whiteness was not the only concern among students that affected their perception of access. A troubling percentage of minoritized students participating in the study have never been encouraged by school staff to pursue advanced courses. For students at Horace James, access to advanced math courses can mean having to double up on math courses or take summer courses to “catch up” to their white peers. And perhaps most importantly, from both students and staff participating in this study comes a clear message that additional layered support for first time minoritized students in advanced courses is not expected, infrequently seen or offered, yet a critical component of what would make these courses feel truly accessible to these students.

Systems and Culture

Perhaps one of the most telling and problematic pieces of data to come out of this study related to the systems in which these minoritized students move is that as a general rule, teachers don’t even know which students are first time advanced placement students or which ones may not be as familiar or comfortable with the advanced pathway. Even more troubling, specific to Mason Springs HS, is that the high school has implemented the Avid program, one of the main objectives of which is to expose underrepresented students to advanced courses. In fact, it’s a required component of the program. And yet, those teachers don’t have advanced notice of which students are less familiar or first-timers, so can’t be proactive in their approach to those students who may very well need some additional support, or simply perhaps an informal orientation to the design and rigor of those courses. Further, while all three of the Mason Springs teachers know that Avid places students unfamiliar to the advanced coursework in their classes, two spoke only of a “one size fits all” type support system for struggling students that they or the school has

built into the fabric of their day, and the third matter of factly said that all students are held to the same standard and given the same level of support. At Horace James, while one of the two teachers is generally encouraging, and in some cases recruiting more students to participate in his advanced classes, Val was the only teacher of the five that seemed to recognize the need for supporting these students, and was quick to acknowledge that the school and the system was not doing its job in creating purposeful steps to closing the gap.

Students are aware of the inequities created by the system, both at the high school level and all the way through the K-12 system. One student from Horace James HS talked about the lack of equity as making her uneasy in multiple ways:

The uneasiness I get from AP is, if this is the standard they believe is better, then why don't they teach everyone it? If it's not equal, then you're saying the other kid is getting a lesser education...I just don't think they should be giving you the choice to be taking accelerated or AP classes. If it's not going to be equal to the other students taking the same course. Like, if I'm taking English regular [sic] or AP, you're saying that one kid is getting a better education in English in the same high school setting. I just don't see where it is equal there.

There are certainly places in both study schools where minoritized students and first-time students are finding their way into advanced courses, and certainly meeting with success. What's notable at both schools however, is that none of the teachers, even those at Mason Springs with the intentionality of a program like Avid, could articulate any purposeful planful system approach to solving or even shrinking the opportunity gap. Ironically, both schools, in the students who participated in this study, have access to a

wealth of information and ideas that could certainly be helpful in beginning to address the issue. And a key place to start is considering the possibility that the responsibility for beginning to close the opportunity gap does not rest on student-initiated efforts and actions. The adults within the system need to be the agents of change, in relentless tireless ways.

Motivation

The students from Horace James HS and Mason Springs HS who participated in the survey, are motivated by a diverse array of forces when they make their course selections. They are certainly motivated by that teacher or those teachers who personally tell them that is where they belong. A teacher's encouragement to take advanced courses, and the inverse, both were described as having "immense" or "significant" impact, and in many cases was described as the determining factor in the decision. But the personal touch matters, as one student articulated:

If it's something where the teacher came up to me and they were like, "Hey, I think you should do [this]. I'm going to be much more likely to actually go out and do that rather than [if the teacher is talking to] a group of students or an entire class where it's like, "Your class on average does this, so you should probably consider this." I think it's the aspect of human connection that [makes a big difference.]

In most cases, the teacher's personal encouragement told the student they should believe in themselves, and made them feel valued and capable.

Both students and teachers understand some of the more pragmatic reasons for enrolling in advanced coursework. An interest in the content of the course, the ability to

get a start on working with rigorous curriculum, potentially earn college credit, and also simply removing the barrier of worry about what college will be like are all motivating factors. If a student has experienced high levels of rigor, they will be less apprehensive and stressed about similar courses once they matriculate to their college experience.

Motivation to take advanced coursework comes from outside of school as well, and in some cases, with a high degree of pressure to enroll and perform well. In some cases, minoritized families see a lot at stake in their children's performances in these classes, and make that clear to the students. It can be motivating, but it can be significant pressure as well.

In the process of helping students through registration, teachers utilize this window to help students understand more about the courses available and whether or not they should take on the challenge of advanced coursework. Ultimately, this dialogue between teacher and student can be foundational to what motivates students to make their final course decisions. From a discussion about the types of students with whom they would get to interact, to specific questions of students about their interests, goals, and strengths, students can glean valuable information that not only clarifies their options, but ideally steers them to courses of higher rigor.

Finally, as mentioned throughout chapter four and here in chapter five, who might be taking the course with them is a key motivating factor for students. In some cases, this is about friends. In others, this is about simply having their own color and culture reflected back by more than just the windows of the classroom. Someone who looks like you may not seem important to all of us--until we are faced with the experience of not having that someone.

Limitations

The data from the student surveys, and the student and staff interviews add important detail to the study in that they provide first-hand perspectives on the challenges related to shrinking the opportunity gap in similar schools. The two qualitative data sets (student and staff interviews), however, involved relatively small samples of students and adults in the two schools. Though it is based on a relatively small number of participants, however, this is a fairly typical high school, and the understanding of factors related to advanced course taking for underrepresented students are likely transferable, at least in part, to similar settings.

That said, while generalizability is not the intent of this study, or interpretive research in general, discovering the perspectives and perceptions of minoritized students in the course registration process, and the perceptions, attitudes, and beliefs of their teachers in two non-urban midwestern high schools can inform both the theory and practice of other teachers in similar settings.

Implications for Policy and Practice

Ultimately, the findings are valuable only insofar as they drive action in our schools and by our school personnel. It is with this belief as the backdrop that I examine how an understanding of these student experiences can help schools increase participation and ensure success for minoritized students in advanced level coursework.

Teachers

The only thing that was perhaps more telling in the student responses than the *frequency* with which the students spoke of the teachers impact on their willingness to enroll in rigorous coursework was the *speed* with which they uttered “the teacher” in

response to those questions. During the interviews, the lack of hesitation or the lack of the need for time to think was consistent and convincing across all of the student interviews. These student-teacher relationships matter.

Student after student in this study spoke to teachers who encouraged, gave more of themselves, went above and beyond, and were tireless in their demonstration of care for them as students and people. But it is not simply about *knowing* each other.

Immordino-Yang confirms this:

People sometimes mistake a kind of casual familiarity and friendliness for the promotion of really deep relationships that are about a child's potential, their interests, their strengths, and weaknesses. A lot of teachers ... have really strong abilities to engage socially with the students, but then it's not enough. You have to go much deeper than that and actually start to engage with students around their curiosity, their interests, their habits of mind through understanding and approaching material to really be an effective teacher (Sparks, 2019).

Teachers simply have to arrive at school every day aware of their ability to impact and influence not only the students they have in class, but the students they previously had, and the students they may simply greet in the hallways and cafeterias. They also have to be willing to use it in ways that move school communities forward--and no place is that more significant than moving more of our minoritized students into advanced coursework. There is no formula for this, other than to say that anything goes when it comes to encouraging, connecting with, and convincing students of their worth as scholars, people of color, and people in general. Moreover, teachers simply need to be *relentless*, as the successful teachers in the study conducted by Chenoweth and Theokas

were “unwavering” in their belief in minoritized students and their efforts to make it so (2013).

Secondly, much like the lenses of bias that we all view the world in everyday life, teachers need to be aware of the lenses through which they view students to ensure they don’t limit the minoritized students in front of them with attitudes they’ve developed unrelated to those students. Florez (2007) and Madrid (2011) both concluded that the achievement of minoritized students requires teacher support, and adequate teacher support is absolutely dependent on how teachers perceive minoritized students. This study further confirms this.

Educators do not approach general courses with the expectation that all students can do a certain set of entry level skills. Neither should they with advanced courses. As long as teachers perpetuate the attitude that advanced students already have or already should have those skills, they will also perpetuate the exclusionary nature of those advanced courses, even while proclaiming the advanced courses are accessible and self-selected. There must be a commitment to meet students where they are, strongly encourage them to enroll in the advanced courses, and then provide them with the additional support and time needed to maximize their opportunity for success once they are there.

There are components of this approach that are complicated by some of the curricular demands that nationally normed programs like AP require of its teachers and the students: students need to move through the entire curriculum by a fixed point in the school year to be ready for the AP examination. With some school calendars, this leaves a limited amount of wiggle room for reteaching and other supports within the confines of

the class hour. That said, more recent demands on in class instruction like the Covid-19 pandemic of 2020-2021 which reduced and in many cases shuttered in-person instruction for significant periods of time, have demonstrated that when the fixed deadline remains fixed, and instructors are left with no choice but to alter their method and time for delivery, great teachers can isolate the critical core elements of instruction and shepherd their students to success.

There is an interesting irony that reveals itself when we compare teachers' responses to working with struggling learners in regular level courses and working with learners who might struggle with the rigor of advanced courses. In my own context, I was inspired recently by a colleague who as an intervention specialist, sought out 13 students who, left to their own devices, would be unable to complete the work necessary to earn their English credit. Her "project" required reteaching, tutoring, deadline extensions, and time, but in the end, all nineteen of the students she was working with successfully completed their credit. If asked, I'm guessing many of those students would convince you that they had just completed a rigorous course. They made sacrifices, they worked hard, they pushed themselves, but they were also *acted upon* by a teacher who first identified a group the data said could not do it, and using reasonable logical tools available to her and to them, helped them earn the credit.

If teachers are willing to apply the same types of supports in advanced courses where they do not typically appear, it would seem that similarly inspiring results could be realized. This is hard work. It requires extra effort to reteach and to tutor. It requires extra effort to extend deadlines, and to allow students time. But unlike so many initiatives touted as revolutionary in schools today, it requires no specialized training other than the

training required for professional licensure, and perhaps a willingness to be alert and an unwillingness to settle.

School Leaders

Not long ago, I had a conversation with a school superintendent about the opportunity gap in advanced coursework enrollment in their high school. Their idea for tackling it in the short-term was to require all students to enroll in at least one AP course, or, similar to that, teach all sections of a given course that has an AP version as that AP course. While that strategy is not totally without merit--it is a strategy informed by Klepfer and Hull's conclusion that simply being in advanced courses with rigorous curriculum is beneficial to learners regardless of their level of success (2012), it is a strategy that ignores any responsibility on the part of the school staff to either prepare to meet the underrepresented learners where they are or to purposefully and proactively layer support within those classes. Instead, it implies that the main issue is that they are just not in that room, and assumes that the simple act of *placing* students in rigorous courses will either cause them to rise to the challenge or that they'll simply absorb the added value of the increased rigor. This was exactly the conclusion of Superville (2016) and Flores & Gomez (2011), who detailed professional development for staff, increased resources for teachers, and more time put into helping teachers understand what has to happen once the students are there, in that classroom, in front of them.

School leaders need to work with teachers who share the attitude or belief that advanced coursework is not where the skills necessary for success in advanced coursework are formed and developed; it's where they are to be *revealed*. Certainly, it would be incorrect to suggest that few or none of the students who enroll in rigorous

courses have those skills already developed and solid. Many certainly do. In fact, the high percentage of those who do is likely part of the reason that the attitude is pervasive. The attitude, however, summarily eliminates a large group of students who could be successful with the right supports, and unwittingly perpetuates and exacerbates that opportunity gap in these as well as all schools. And it's important to note here that it might be less about these students needing additional support and more about teachers being open to student skills that simply manifest differently than we are used to thinking about them.

When Wayne spoke of advanced students being more interested and more interesting, he put those students in a very narrow box--the same box that Lidz & Macrine assert is not compatible with all students with potential (2001). Minoritized students will have better access when teachers and school leaders recognize that giftedness and rigorous academic potential manifest in many different ways. In addition, leaders need to be aware of, acknowledge, and honor differences in culture that may dramatically affect how minoritized students react to or interact with the American school system. Jules Henry referenced this when he commented that while the American system is built on competition and the idea that success of some is contingent on the failure of others, some cultural groups, would see such a system as "cruel beyond belief" (1963). For a student who sees the school system this way, leaders need to be ready to implement strategies that increase student comfort and counter that student's belief system. This is not to say leaders "fix" the student; rather, the work required is in bridging the gap in ways that change the system so it works for the student, not the other way around. Only

then will Val's Black and Brown students "just below the line" consistently find themselves above it.

School leaders have to be willing to take a step like the superintendent described earlier in this chapter: be intentional, purposeful, and unapologetic in their efforts to increase the enrollment of minoritized students in advanced coursework. But in truth, that is the easy part. Any person with authority to change student schedules can move minoritized students into advanced courses. School leaders must do more. As superintendents and principals, they need to ensure teaching staff understand the importance of increasing minoritized enrollment in advanced courses. Helping teachers internalize that importance will also help motivate them to develop ways to support those students in whatever ways they need to be supported. If teachers cannot internalize its importance, then they need to see it as a professional expectation and obligation. Principals or principal designees must also help teachers know more about the students on their advanced course rosters. Which students are first-time AP students? Which students may need additional supports? This information can take the form of test scores and grades, as well as anecdotal information gathered and known about the students.

As instructional leaders, they must work with their teachers who teach the advanced courses to understand that working with AP classes is not any different than working with regular classes, and that in both settings, certain students may need individualized attention, reteaching, tutorial support during and outside of class, support with organization and time management, and time to develop their understanding of how to best prepare for the increased level of rigor. Resources like Multi-Tiered Systems of Support (MTSS) need to be available to these students, certainly, but the focus has to be

on working with minoritized students within the confines of the class hour to achieve rigorous academic goals, just like the focus would be on helping struggling learners achieve a passing grade.

As was mentioned earlier in the implications for teachers, there are time constraints to this type of support, particularly in advanced coursework governed by external entities like the College Board. To some extent, teachers simply need school leaders to grant them *permission* to alter the timeline in spite of these obstacles, and to reassure them that it is in the best interest of all stakeholders for teachers to modify their methods to allow the time necessary to support first-time and struggling AP students.

Also, in a broader context, school leaders need to consider the voices of their own students like the students in this study, and recognize that the effectiveness of school structures, or the lack of their effectiveness, is likely something students see, understand, and can articulate. School leaders need to listen to these voices, and use what they hear to guide, reform, or rebuild the very systems that are preventing minoritized students from not only enrolling in advanced courses, but also what is preventing them from participating across the school-based opportunity landscape. In my own school, that means purposely increasing the enrollment of minoritized students in advanced courses, but also making sure more of them are singing in the choir, auditioning and *being cast in* the fall musical and spring play, and being chosen to represent the school and the student population at public forums, meetings, and at school events like graduation.

School Systems

In their assessment of the issues that are allowing the gap to persist at Horace James High School, Val was honest and straightforward in their belief that not only is the

high school underperforming when it comes to moving the needle on minoritized student enrollment in advanced level courses, but also the district, and perhaps the whole educational system is underperforming in closing the gap long before those students arrive at the high school. Val's incredulity when examining the number of minoritized students who just miss being enrolled in advanced courses speaks to the potential impact that school systems can make in moving this needle, especially when one considers, at least in this one example, how small an adjustment to the process is necessary to increase the minoritized student enrollment substantially.

The students Val describes are not struggling learners. They are a cluster of black and brown students who are *right below* the line between the advanced course and the regular, in a program where students are able to choose the advanced over the regular. More troubling, and at the same time more promising is that moving them *all* not only is a fairly small jump given they are just below the line, but also having a group of them to move immediately and organically mitigates the comfort issue that students in this study declared so critical to their willingness to register for these advanced courses. Moving together, these students would have access to the rigorous curriculum and be able to look around and, in seeing each other, see themselves and be much more comfortable, eliminating what Kerr's study determined was an "overly white complexion" in advanced course classrooms, not unlike the two schools in this study (2014).

Also, in a school and a system, particularly given the way that "placement" works in certain disciplines, where students are placed in the appropriate "track" based on some pre-established criteria, the eyes of leaders need to be open *from the beginning* of that placement. Leaders need to be asking themselves and the teachers: are all of the students

who are capable and all the students with the potential to be capable included? And once that question is answered *the first time*, leaders have to be relentless in reviewing student performance and asking it again. As a part of this process, systems need to consider the value or the detriment of tracking of students in the first place. When systems like this that “pigeon hole” students into certain levels of rigor essentially eliminate all but those students originally selected for the higher levels of rigor, school systems need to consider ways to not only allow students, but to look for student to jumps tracks, and also to look for places where the tracking of students can be reduced or eliminated.

Systems must also be intentional in their pursuit of minoritized students who will close the gap. It is not enough to gaze in wonder at a cluster of minoritized students who are oh, so close. Admiring the problem and how close they are to solving it is not action and it is not leadership. It is the responsibility of school leaders to know their demographic and be restless for moving the enrollment of those advanced classes closer to it.

Implications for Further Research

This study was, in truth, in pursuit of data that would shine additional light on what is wrong. In my experience as a school administrator, I have seen examples where, despite our best efforts to lower expectations, reduce access, make minoritized students uncomfortable, and limit opportunities for them, they persevere and succeed. They succeed in AP classes, they graduate from high school, and they are successful college students and working professionals. They represent the next data set.

Further study needs to consider these examples of students who have been successful in schools and systems that will allow educators and school leaders to better

understand the finished product of such a successful pathway. This understanding could then inform the practice of school leaders and teachers in an effort to replicate the characteristics of systems that worked for those minoritized students, thereby reducing, and perhaps one day eliminating the opportunity gap that has persisted for far too long.

Closing

There is obviously no easy answer to a widely known and often examined problem like the advanced coursework opportunity gap. But the beginning of the solution may not ultimately be found in things we add to our educational programs, but rather, like teacher attitudes about advanced students, the beginning may simply need to start with awareness. However, the beginning of the solution may look, *that* we begin, for the sake of these and all students, is where educators everywhere must focus their efforts and their passion. The difference-making is there for the taking.

References

- Abi-Nader, J. (1990). "A house for my mother": Motivating Hispanic high school students. *Anthropology & Education Quarterly*, 21(1), 41-58.
doi:10.1525/aeq.1990.21.1.05x1162r
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. White Plains, NY: Longman.
- Adler, A. (1939). *Social interest: A challenge to mankind*. New York: Putnam.
- Bandura, A. (1993). Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*, 28(2), 117.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117 497-529. doi:10.1037/0033-2909.117.3.497
- Batiwalla, M., & Tennessee Department of, E. (2014). Advanced Placement Strategy: A Framework for Identifying School-Level Barriers to AP Success. Policy Brief.
- Beck, M., & Malley, J. (1998). A Pedagogy of belonging. *Reclaiming Children & Youth*, 7(3), 133.
- Blume, H. (2017, June 18). In Lynwood, advanced placement courses are no longer only for the elite. *Los Angeles Times*. Retrieved from <http://www.latimes.com/local/lanow/la-me-edu-lynwood-advanced-placement-tests-20170618-story.html>
- Bowen, W. G., Chingos, M. M., & McPherson, M. S. (2009). Crossing the Finish Line: Completing College at America's Public Universities. *Trusteeship*, 17(6-), 24-29.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

Brookhart, S., & Rusnak, T. (1993). A pedagogy of enrichment, not poverty: Successful lessons of exemplary urban teachers. *Journal of Teacher Education*, 44(1), 17-26.

Chenoweth, K., & Theokas, C. (2013). How high-poverty schools are getting it done. *Educational Leadership*, 70(7), 56-59.

Cisneros, J., Holloway-Libell, J., Gomez, L. M., Corley, K. M., & Powers, J. M. (2014). The Advanced Placement Opportunity Gap in Arizona: Access, Participation, and Success. *AASA Journal Of Scholarship & Practice*, 11(2), 20-33.

Cohen, G. L., & Garcia, J. (2005). "I am us": Negative stereotypes as collective threats. *Journal Of Personality & Social Psychology*, 89(4), 566-582. doi:10.1037/0022-3514.89.4.566

Cohen, G. L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science*, 313(5791), 1307-1310.

Cohen, G. L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Brzustoski, P. (2009). Recursive processes in self-affirmation: Intervening to close the minority achievement gap. *Science*, 324(5925), 400-403.

College, B. (2014). The 10th Annual AP® Report to the Nation. *College Board*.

Corra, M., Carter, J., & Carter, S. (2011). The interactive impact of race and gender on high school advanced course enrollment. *The Journal of Negro Education*, 80(1), 33-46.

- Davis, P., Davis, M. P., & Mobley, J. A. (2014). The school counselor's role in addressing the advanced placement equity and excellence Gap for african-american students. *Professional School Counseling, 17*(1), 32-39.
- Del Giudice, M. (October 14, 2014). Grit trumps talent and IQ: A story every parent (and educator) should read. *National Geographic*. Retrieved from <http://news.nationalgeographic.com/news/2014/10/141015-angela-duckworth-success-grit-psychology-self-control-science-nginnovators/>.
- Demerath, P. (2017). Developing improvement-oriented culture and academic mindsets in a U.S. urban high school: Mapping an emotional ecology. Urban Secondary Schools Conference. University of Minnesota.
- Denby, D. (2016, June 21) The limits of grit, *The New Yorker*. Retrieved from <https://www.newyorker.com/culture/culture-desk/the-limits-of-grit>
- Deruy, E. (2016, June 7). Where Calculus Class Isn't an Option. *The Atlantic*. Retrieved from <https://www.theatlantic.com/education/archive/2016/06/where-calculus-class-isnt-an-option/485987/>
- Dewey, J. (1958). *Experience and nature*. New York: Dover.
- Dillon, S. (2006, November 20). Schools slow in closing gaps between races. *The New York Times*, p. A1.
- Dougherty, C., Mellor, L., Jian, S., & National Center for Educational, A. (2006). The Relationship between Advanced Placement and College Graduation. 2005 AP Study Series, Report 1.

- Donohoo, J. j. (2018). Collective teacher efficacy research: Productive patterns of behaviour and other positive consequences. *Journal Of Educational Change*, 19(3), 323-345. doi:10.1007/s10833-018-9319-2
- Dubner, S. J. (2008, March 18). How can the achievement gap be closed? A freakonomics quorum. *New York Times*. Retrieved from <http://freakonomics.com/2008/03/18/how-can-the-achievement-gap-be-closed-a-freakonomics-quorum/>
- Duncan-Andrade, J. R. (2009). Note to educators: Hope required when growing roses in concrete. *Harvard Educational Review*, 79(2), 181-194.
- Dweck, C. (2016). *Mindset: The new psychology of success*. New York: Ballantine.
- Dweck, C. S. (2016). The remarkable reach of growth-mindsets. *Scientific American Mind*, 27(1), 36-41.
- Duckworth, A. (2016). *Grit: the power of passion and perseverance*. New York: Scribner & Sons.
- Ebmeier, H. (2003). How supervision influences teacher efficacy and commitment: An investigation of a path model. *Journal of Curriculum and Supervision*, 18(2), 110–141.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., Vol. 119-161). NY: Macmillan.
- Faircloth, B., & Hamm, J. (2005). Sense of belonging among high school students representing four ethnic groups. *Journal Of Youth & Adolescence*, 34(4), 293-309. doi:10.1007/s10964-005-5752-7

- Ferguson, R. F. (2003). Teachers' Perceptions and Expectations and the Black-White Test Score Gap. *Urban Education*, 38(4), 460-507.
- Flores, A. (2007). Examining disparities in mathematics education: Achievement gap or opportunity gap? *High School Journal*, 91(1), 29-42. doi:10.1353/hsj.2007.0022
- Flores, S., & Gomez, M. O. (2011). Strategies for increasing advanced placement participation for underrepresented students: Barriers, practices, and positive outcomes. *NASSP Bulletin*, 95(1), 65-79.
- Frasier, M. M., & Passow. A. H. (1994). *Toward a new paradigm for identifying talent potential* (Research Monograph 94112). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.
- Freire, P. (1997). *Pedagogy of hope*. New York: Continuum.
- Freud, S. (1930). *Civilization and its discontents* (J. Riviere, Trans.). London: Hogarth Press.
- Gaitan, C. D. (2012). Culture, literacy, and power in family–community–school–relationships. *Theory Into Practice*, 51(4), 305-311.
doi:10.1080/00405841.2012.726060
- Gamoran, A., Nystrand, M., Berends, M., & LePore, P.C. (1995). An organizational analysis of the effects of ability grouping. *American Educational Research Journal*, 32(4), 687-715.
- Garcia, Julio and Cohen, Geoffrey Lawrence. (August 15, 2011). A social psychological perspective on educational intervention. *The behavioral foundations of policy*, E. Shafir, ed. Available at SSRN: <https://ssrn.com/abstract=1910232>

- Gillock, K. L., & Reyes, O. (1999). Stress, support, and academic performance of urban, low-income, Mexican-American adolescents. *Journal Of Youth & Adolescence*, 28(2), 259.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction*. (2nd ed.). New York: Longman.
- Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching & Teacher Education*, 17(7), 807-818. doi:10.1016/S0742-051X(01)00032-4
- Goddard, R. D., Hoy, W. K., & Woolfolk, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, 33, 3–13.
- Golden, N. A. (2017). There's still that window that's open: The problem with grit. *Urban Education*, 52(3), 343-369.
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal Of Experimental Education*, 6260-71. doi:10.1080/00220973.1993.9943831
- Gu, Q., & Day, C. (2007). Teacher resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, 23, 1302–1316.
- Hamilton, S. (1983). The social side of schooling: Ecological studies of classrooms and schools. *The Elementary School Journal*, 83, 313-334.
- Handwerk, P., Tognatta, N., Coley, R. J., Gitomer, D. H., & Educational Testing Service, P. C. (2008). Access to Success: Patterns of Advanced Placement Participation in U.S. High Schools. Policy Information Report.

- Haigh, Martin (2011). Invitational Education: Theory, Research and Practice. *Journal of Geography in Higher Education*, 35:2, 299-309, DOI: [10.1080/03098265.2011.554115](https://doi.org/10.1080/03098265.2011.554115)
- Hickson, J. & Skuy, M (1990). Creativity and cognitive modifiability in gifted and disadvantaged pupils: A promising alliance. *School Psychology International*, 11(4), 295-301.
- Immordino-Yang, M. H., Darling-Hammond, L., Krone, C., & Aspen Institute, N. C. on S. E. & A. D. (NCSEAD). (2018). The Brain Basis for Integrated Social, Emotional, and Academic Development: How Emotions and Social Relationships Drive Learning. *Aspen Institute*. Aspen Institute.
- Henry, Jules. (1966). *Culture Against Man*. Tavistock.
- Johnson, D., Wasserman, T., Yildirim, N., & Yonai, B. (2014). Examining the Effects of Stress and Campus Climate on the Persistence of Students of Color and White Students: An Application of Bean and Eaton's Psychological Model of Retention. *Research in Higher Education*, 55(1), 75–100. <https://doi-org.ezp1.lib.umn.edu/10.1007/s11162-013-9304-9>
- Johnston, R. C. (1999). Bush warns against the 'soft bigotry of low expectations.' *Education Week*, 19(3), 18.
- Kerr, R. (2014). "Advanced classes? they're only for white kids": How one kansas school Is changing the face of honors and advanced placement courses. *Action In Teacher Education (Routledge)*, 36(5/6), 480-489.
doi:10.1080/01626620.2014.977748

Ketelsen, T. (2017, June 15). How to support first-time advanced placement students.

(Web log comment). Retrieved from

http://blogs.edweek.org/edweek/urban_education_reform/2017/06/how_to_support_first-time_advanced_placement_students.html

Khalifa, Muhammad. (2018). *Culturally Responsive School Leadership*. Harvard Education Press.

Kitchen, R. S. (2007). *Mathematics education at highly effective schools that serve the poor*. Mahwah, NJ: Lawrence Erlbaum Associates.

Klepfer, K., & Hull, J (2012). High school rigor and good advice: Setting up students to succeed. Alexandria, VA: The Center for Public Education.

Klopfenstein, K. (2004). Advanced placement: Do minorities have equal opportunity? *Economics Of Education Review*, 23(2), 115-131.

Kohli, S. (2014, November 18). Modern-day segregation in public schools. *The Atlantic*. Retrieved from <https://www.theatlantic.com/education/archive/2014/11/modern-day-segregation-in-public-schools/382846/>

Kyburg, R. M., Hertberg-Davis, H., & Callahan, C. M. (2007). Advanced Placement and International Baccalaureate Programs: Optimal Learning Environments for Talented Minorities?. *Journal Of Advanced Academics*, 18(2), 172-215.

Leer, E. (2010). Multicultural literature in monocultural classrooms: White teachers explore diverse texts with White students. Lewiston, NY: Edwin Mellen Press.

Lidz, C. S. (1997). Dynamic assessment: Psychoeducational assessment with cultural sensitivity. *Journal of Social Distress and the Homeless*, 6(2), 95-112.

- Lidz, C. S., & Macrine, S. L. (2001). An alternative approach to the identification of gifted culturally and linguistically diverse learners: The contribution of dynamic assessment. *School Psychology International*, 22(1), 74-96.
- Lohman, D. (2005). An aptitude perspective on talent: Implications for identification of academically gifted minority students. *Journal for the Education of the Gifted*, 28, 333-360.
- Madrid, E. M. (2011). The latino achievement gap. *Multicultural Education*, 18(3), 7-12.
- Marland, S. P. (1976). Advanced placement: An above-average opportunity. *Today's Education*, 59(391), 33-41.
- Means, B., & Knapp, M. S. (1991). Cognitive approaches to teaching advanced skills to educationally disadvantaged students. *Phi Delta Kappan*, 73(4), 282-89.
- Moreno, G. (2014). Closing the opportunity gap: what America must do to give every child an even chance. *Choice: Current Reviews For Academic Libraries*, 51(7), 1274.
- Munsch, J., & Wampler, R. S. (1993). Ethnic differences in early adolescents' coping with school stress. *American Journal of Orthopsychiatry* 63(4): 633-646.
- Oakes, J. (1995). Two cities' tracking and within-school segregation. *Teachers College Record*, 96(4), 681-690.
- Oakland, T., & Rossen, E. (2005). A 21st century model for identifying students for gifted and talented programs in light of national conditions: An emphasis on race and ethnicity. *Gifted Child Today*, 28(4), 57-63.
- Oberjuege, Mark. (1999). Raising the Bar: Historically Disadvantaged Students Can Meet the AP Challenge. *The History Teacher*. 32(2), 263-267.

- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review Of Educational Research*, 70(3), 323.
- Pekel, K. (2012). *To Take or Not to Take: Factors that Influence the Decisions that Students Make About Taking College-Level Courses in High School* [Unpublished doctoral dissertation/master's thesis]. University of Minnesota.
- Quinton, S. (2014, December 11). The race gap in high school honors classes. *The Atlantic*. Retrieved from <https://www.theatlantic.com/politics/archive/2014/12/the-race-gap-in-high-school-honors-classes/431751/>
- Ralston, N. (2017, June 12). Working Toward Equitable Advanced Placement Programming. (Web log comment). Retrieved from http://blogs.edweek.org/edweek/urban_education_reform/2017/06/working_toward_equitable_advanced_placement_programming.html
- Ramos, M., Silva, S., Pontes, F., Fernandez, A., & Nina, K. (2014). Collective teacher efficacy beliefs: A critical review of the literature. *International Journal of Humanities and Social Science*, 4(7), 179-188.
- Rankin, M. A. (2012). Encouraging AP success for all students. *Education Week*, 31(28), 23.
- Rich, M. (2013, November 27). Pulling a more diverse group of achievers into the advanced placement pool. *New York Times*. pp. A1-A3.
- Richert, E. S. (1985). Identification of gifted children in the United States: The need for pluralistic assessment. *Roeper Review*, 8(2), 68-72.

- Ris, E. (2015). Grit: A short history of a useful concept. *Journal of Educational Controversy*, 10(1), 1-18.
- Robertson-Kraft, C., & Duckworth, A. L. (2014). True grit: Trait-level perseverance and passion for long-term goals predicts effectiveness and retention among novice teachers. *Teachers College Record*, 116(3), 1-27.
- Roegman, R., & Hatch, T. (2016). The AP lever for boosting access, success, and equity. *Phi Delta Kappan*. 97(5), 20-25.
- Rothschild, E. (1999). Four decades of the advanced placement program. *History Teacher*, 32(2), 175-206.
- Samuels, C. A. (2017, February 22). Casting a Wider Net for Giftedness. *Education Week*. Retrieved from <http://video.edweek.org/detail/videos/school-district-leadership/video/5332552024001/casting-a-wider-net-for-giftedness?autoStart=true>
- Saunders, T., & Maloney, K. (2005). Boosting Black Academic Achievement and AP Enrollments. *Education Digest: Essential Readings Condensed For Quick Review*, 70(6), 54-57.
- Schneider, J. (2009). Privilege, equity, and the advanced placement program: Tug of war. *Journal Of Curriculum Studies*, 41(6), 813-831. doi:10.1080/00220270802713613
- Sewell, T. E. (1979). Intelligence and learning tasks as predictors of scholastic achievement in Black and white first-grade children. *Journal Of School Psychology*, (17), 325-332. doi:10.1016/0022-4405(79)90033-5

- Sewell, T. E., & Severson, R. A. (1974). Learning ability and intelligence as cognitive predictors of achievement in first-grade black children. *Journal of Educational Psychology*, 66(6), 948-955.
- Skuy, M., & And, O. (1988). Dynamic assessment of intellectually superior Israeli children in a low socio-economic status community. *Gifted Education International*, 5(2), 90-96.
- Smydo, J. (2007, August 6). College board cool to AP course in African-American history. *Pittsburgh Post-Gazette*. Retrieved from <http://www.post-gazette.com/news/education/2007/08/05/college-board-cool-to-AP-course-in-African-American-history/stories/200708050138>
- Sparks, S. D. (2019). Why Teacher-Student Relationships Matter. *Education Week*, 38(25), 8.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African-Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Superville, D. R. (2016). San Diego strives to close gap in access to advanced courses. *Education Week*, 35(27), 7.
- Syme, S. L. (2004). Social determinants of health: The community as empowered partner. *Preventing Chronic Disease: Public Health research, Practice, and Policy*, 1(1), 1-4.
- Theokas, C., & Saaris, R. (2013). Finding America's missing AP and IB students. *The Education Trust*: Washington, DC.

- Tough, P. (2012). *How children succeed: Grit, curiosity and the hidden power of character*. New York: Houghton Mifflin Harcourt
- Tough, P. (2016). *Helping children succeed: What works and why*. New York: Houghton Mifflin.
- Triandis, H. C. (1990). Cross-cultural studies of individualism and collectivism. In Berman, J. J. (ed.), *Nebraska Symposium on Motivation 1989: Cross-Cultural Perspectives*. University of Nebraska Press, Lincoln, pp. 41-133.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering Student Learning: The Relationship of Collective Teacher Efficacy and Student Achievement. *Leadership & Policy In Schools*, 3(3), 189-209. doi:10.1080/15700760490889484
- VanSciver, J. (2006). Glosing the Diversity Gap in Advanced Placement Course Enrollment. *Multi-Cultural Perspectives*, 8(3), 56-58.
- Walker, S. A., & Pearsall, L. D. (2012). Barriers to advanced placement for Latino students at the high-school level. *Roeper Review*, 34(1), 12-25.
doi:10.1080/02783193.2012.627549
- Walker, E. (November, 2007). Why aren't more minorities taking advanced math? *Educational Leadership*. 48-53.
- Walker, T. (2002). Something is wrong here. *Teaching Tolerance*, (22), 1-6.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: race, social fit, and achievement. *Journal Of Personality & Social Psychology*, 92(1), 82-96.
- Whiting, G. W., & Ford, D. Y. (2009). Black Students and Advanced Placement Classes: Summary, Concerns, and Recommendations. *Gifted Child Today*, 32(1), 23-26.

- Wilson, N, Minkler, M., Dasho, S., Wallerstein, N., & Martin, A. (2008). Getting to social action: The youth empowerment strategies (YES!) project. *Health Promotion Practice*, 9(4), 395-403.
- Winebrenner, S. (2006). Effective Teaching Strategies for Open Enrollment Honors and AP Classes. *Journal Of Secondary Gifted Education*, 17(3), 159-177.
- Wood, S. M. (2010, January 1). Student Access to Advanced Placement[R] (AP[R]) Coursework: Principals' Beliefs and Practices. *ProQuest LLC*.

Appendix A

Student Survey

Name: _____

How many AP courses have you taken in high school?

- A. 0
- B. 1
- C. 2
- D. 3 or more

Are you:

- A. Male
- B. Female

Please indicate your race/ethnicity (Mark all that apply):

- A. African
- B. Black or African American
- C. American Indian
- D. Asian or Asian American
- E. Hispanic or Latino
- F. White
- G. Other _____

To what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
At my school, all students are expected to go to some type of college.						
I know which classes that I need to take in order to graduate from HS and be ready for college.						

I am willing to take hard classes even though I may get a lower grade.						
At registration time, school staff assist me in choosing classes that will help me reach my goals for education after high school.						
At my school, any student can take an AP course if they want to.						
An adult at my school has encouraged me to take AP classes.						
There is a school staff member who has taken interest in making sure I'm prepared for college success.						

My teachers have high expectations for me.						
I am comfortable taking AP courses.						
I am more willing to take AP courses if I have friends taking them.						
My family encourages me to take AP classes.						
I know I can get support at school if I struggle in AP courses.						

(Pekel, 2012)

Appendix B

Student Interview Protocol

1. What is it like to be a student here?
2. How does a student become a good student here?
3. In general, how do you choose the courses that you plan to take each year in school?
4. As you know, students are able to select advanced courses each year of school.
What advanced courses have you taken or have you considered taking?
5. How did you decide (to take/not to take) advanced courses?
6. Imagine yourself in a rigorous or advanced course:
 - a. What makes that class comfortable/enjoyable for you?
 - b. What makes that class uncomfortable/not enjoyable for you?
7. If a school staff member encouraged you to take a particular advanced course, what impact would that have?
8. If a school staff member encouraged you NOT to take a particular advanced course, what impact would that have?
9. How do you know when a teacher or staff member cares about you?
10. What impact does it have on your academic work when staff members show they care about you?
11. What types of support do you feel you need to ensure you are successful in your school work?

Appendix C

Teacher Interview Protocol

1. How do students end up in advanced courses at this school?
2. Describe the typical advanced coursework student.
3. How are first-time or new advanced coursework students supported in your classes?
4. In your experience, what specific non-cognitive factors, skills, or dispositions have you noticed in successful students in advanced courses?
5. What advantages do you see for students in taking advanced courses as opposed to “regular” courses?
6. There is a gap nationally between the percentage of minoritized & low-income students who access advanced coursework. To what do you attribute that gap?
7. How might you and other teachers in your school support minoritized & low-income students to increase their participation in advanced coursework?
8. What would you tell a student who asked you to help him/her decide between regular and advanced coursework?

Appendix D

Overview of Student Survey Data Results

Horace James High School Survey Data

	Total	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
At my school, all students are expected to go to some type of college.	21	24%	29%	29%	0%	10%	5%
I know which classes I need to take in order to graduate from HS and be ready for college.	21	62%	14%	19%	0%	0%	0%
I am willing to take hard classes even though I may get a lower grade.	21	33%	29%	19%	5%	10%	0%
At registration time, school staff assist me in choosing classes that will help me reach my goals for education after high school.	21	14%	48%	29%	10%	0%	0%
At my school, any student can take an AP course if they want to.	21	67%	10%	14%	5%	0%	0%
An adult at my school has encouraged me to take AP classes.	21	52%	24%	5%	10%	10%	0%
There is a school staff member who has taken an interest in making sure I'm prepared for college success.	21	29%	43%	19%	10%	0%	0%
My teachers have high expectations for me.	21	48%	43%	10%	0%	0%	0%
I am comfortable taking AP courses.	21	48%	24%	19%	0%	0%	5%
I am more willing to take AP courses if I have friends taking them.	21	33%	33%	10%	5%	14%	5%
My family encourages me to take AP classes.	21	43%	33%	10%	10%	5%	0%
I know I can get support at school if I struggle in AP courses.	21	52%	10%	24%	10%	0%	0%

Mason Springs High School Survey Data

	Total	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
At my school, all students are expected to go to some type of college.	24	13%	25%	42%	13%	0%	8%
I know which classes I need to take in order to graduate from HS and be ready for college.	24	38%	46%	13%	4%	0%	0%
I am willing to take hard classes even though I may get a lower grade.	24	25%	42%	17%	8%	4%	4%
At registration time, school staff assist me in choosing classes that will help me reach my goals for education after high school.	24	21%	21%	17%	4%	13%	25%
At my school, any student can take an AP course if they want to.	24	29%	17%	25%	17%	13%	0%
An adult at my school has encouraged me to take AP classes.	24	13%	4%	25%	8%	33%	17%
There is a school staff member who has taken an interest in making sure I'm prepared for college success.	24	17%	17%	29%	0%	21%	17%
My teachers have high expectations for me.	24	21%	21%	38%	8%	8%	4%
I am comfortable taking AP courses.	24	21%	21%	21%	13%	25%	0%
I am more willing to take AP courses if I have friends taking them.	24	25%	21%	25%	17%	8%	4%
My family encourages me to take AP classes.	24	33%	13%	17%	17%	21%	0%
I know I can get support at school if I struggle in AP courses.	24	21%	17%	17%	29%	8%	8%

Combined Schools Survey Data

	Total	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
At my school, all students are expected to go to some type of college.	45	18%	27%	36%	7%	4%	7%
I know which classes I need to take in order to graduate from HS and be ready for college.	45	49%	33%	16%	2%	0%	0%
I am willing to take hard classes even though I may get a lower grade.	45	29%	38%	18%	7%	7%	2%
At registration time, school staff assist me in choosing classes that will help me reach my goals for education after high school.	45	18%	33%	22%	7%	7%	13%
At my school, any student can take an AP course if they want to.	45	47%	16%	20%	11%	7%	0%
An adult at my school has encouraged me to take AP classes.	45	31%	13%	16%	9%	22%	9%
There is a school staff member who has taken an interest in making sure I'm prepared for college success.	45	22%	29%	24%	4%	11%	9%
My teachers have high expectations for me.	45	33%	31%	24%	4%	4%	2%
I am comfortable taking AP courses.	45	33%	24%	20%	7%	13%	2%
I am more willing to take AP courses if I have friends taking them.	45	29%	27%	18%	11%	11%	4%
My family encourages me to take AP classes.	45	38%	22%	13%	13%	13%	0%
I know I can get support at school if I struggle in AP courses.	45	36%	13%	20%	20%	4%	4%